AN INVESTIGATION OF PEER MENTORING TO EASE THE MIDDLE SCHOOL TO HIGH SCHOOL TRANSITION

by
Christian G. Lorenzo

A dissertation submitted to Johns Hopkins University in conformity with the requirements for the degree of Doctor of Education

Baltimore, MD

August, 2017

Abstract

Transitions are a turning point in development and the middle school to high school transition entails a degree of concern and anxiety for every student (Pickles & Rutter, 1991; Uvaas & McKevitt, 2013). The study at hand explored the degree to which a peer mentoring program called Peer Group Connection (PGC) may ease the negative effects of the middle school to high school transition by facilitating academic, social, and college and career readiness (CCR) outcomes. Ninety-nine students from a Baltimore City Public School participated in the study by completing a series of surveys that measured social anxiety, social capital, and CCR. Forty-five students were in the non-mentored group and 54 students were in the mentored group. Correlational and an independent samples t-test revealed the freshman minority experience. Girls experienced significantly higher social anxiety and first-generation Black girls (FGBG) were more likely to have lower GPAs. However, when mentored students were split by generational status and gender, it was revealed that first-generation girls reported a significantly higher CCR than non-first-generation boys in the areas of interpersonal skills and initiative. FGBG reported a significantly higher collaboration. Girls overall had a significantly higher GPA and social-emotional development than boys. Social capital was found to support peer mentoring through its interactions with GPA, social-emotional development, initiative, and social anxiety. Results suggest that peer mentoring benefited FGBG, the same vulnerable group that was identified in the freshman minority experience. Findings illustrate evidence to suggest that peer mentoring is a worthwhile investment to ease the middle school to high school transition because it facilitated positive academic, social, and CCR outcomes for the students who participated in PGC.

Approval of Final Dissertation

JOHNS HOPKINS
SCHOOL of EDUCATION

Dissertation Approval Form

Student: CHRISTIAN LORENZO Adviser: ILEANA GONZALEZ

Dissertation Title: AN INVESTIGATION OF PEER MENTORING TO EASE THE MIDDLE SCHOOL TO HIGH SCHOOL TRANSITION

Date Approved: 8/3/2017

Required Signatures:	Signature	Print Name
Dissertation Advisor		Ileana Gonzalez
Committee Member		Maureen O'Neill
Committee Member	Jessica McKechnie	Jessica McKechnie
Committee Member		Christine Eith
Student		CHRISTIAN LORENZO

PASS X

PASS WITH CONDITIONS ____

FAIL ____

The Dissertation Adviser must submit the completed form to the Director(s) of the Doctor of Education Program for inclusion in student's doctoral folder.

Please note any special requirements below.

Dedication

This dissertation is dedicated to my niece and nephews,

who I hope to inspire to reach for their dreams.

Acknowledgements

My journey towards the pursuit of education is filled with overwhelming support. My greatest gratitude goes to my parents, Myrna Lorenzo and George Lorenzo, who made many sacrifices to ensure that my siblings and I have the opportunity to attain a college education.

Dr. Ileana Gonzalez, my mentor and advisor who gave me a chance to take my place as an educational leader in urban education. Your support throughout these years has provided me the opportunity of a lifetime. As a first-generation college student, your presence has been my stability and my inspiration to always give back and provide others the same opportunities you have given me and my "fellow Fellows." Thank you.

Dr. Maureen O'Neill, thank you for being my voice when I cannot find the words to express myself. Your brilliance and willingness to advocate for others has been an inspiration.

Dr. Jessica McKechnie, thank you for your patience, support, and flexibility throughout the dissertation process. You were willing to sacrifice time away from your family in order for me to complete the requirements for the Doctor of Education degree.

Dr. Christine Eith and Johns Hopkins University, School of Education. Thank you for equipping me with the tools to enhance my professional work. The Doctor of Education program welcomed me with open arms and gave me the opportunity to meet like-minded professionals in my field who will forever be my colleagues. Dr. Eith, thank you for your hard work and support throughout my time in the program. The 2014 cohort will make you proud!

Table of Contents

List of Tables

List of Figures

Executive Summary

Studies have emphasized the middle school to high school transition's negative effects on students' academic and social development (Benner & Graham, 2009; Barber & Olsen, 2004; Isakson & Jarvis, 1999). These effects are often influenced by gender, race, and socio-economic status (Cohen & Smerdon, 2009; Benner & Graham, 2009). For example, a study found that girls had higher anxiety levels and loneliness across the middle school to high school transition and experienced a faster decline in GPA than boys after the transition (Benner & Graham, 2009). In another study, girls were found to have greater concerns about feelings of social inadequacy and reported more concerns about the social and academic changes of the middle school to high school transition (La Greca & Lopez, 1998). Cavanagh et al. (2007) suggests a biological perspective. It was found that girls who mature earlier were more likely to have lower GPAs and were more likely to fail a course (Cavanagh et al., 2007).

Research on the influence of socioeconomic status and race include Benner and Graham's (2009) study which found that Black and Latino students had a lower sense of school belonging, a decrease in GPA, and an increase in absences when the representation of their ethnic group dramatically declined from middle school to high school. In another study, Akos and Galassi (2004) found that Latino students experienced greater losses in academic achievement in the first year of transition and reported the transition to be more difficult when compared to White and Black students (Akos & Galassi, 2004). Stanton-Salazar and Dornbusch (1995) found that students with lower socioeconomic status significantly reported less access to school-based resources and social capital. Stanton-Salazar and Dornbusch (1995) suggest that many students of

working-class and minority backgrounds have less access to school resources. In fact, The National Office for School Counselor Advocacy (2012) reported that schools with higher numbers of students of color and higher numbers of students on free and reduced lunch also had higher student to counselor ratios. McDonough (1997, 2005) indicated that schools with a high number of low-income students or students of color were less likely to provide counseling due to the large number of caseloads.

A needs assessment was conducted. The needs assessment suggest that GPA, social capital, and high school transition are interconnected. Needs Assessment Part I utilized academic trends (GPA and failure rates) to suggest that there is a need for more middle school to high school transitional support that facilitate positive academic outcomes in School X. Needs Assessment Part II made associations between social capital and GPA and how students with higher social capital yielded higher academic development. Finally, Needs Assessment Part III found a correlation between social capital and the middle school to high school transition. Students with higher social capital were more likely to state that they had a successful high school transition. Therefore, students would benefit from school supports that utilize social capital to ease the middle school to high school transition because it may facilitate positive academic outcomes.

Literature suggests that there is a need for programs that facilitate help-seeking behaviors, supportive ties to peers, collaborative learning, and formation of pro-social, supportive relations that break down socioeconomic barriers (Stanton-Salazar, 1997). Mentoring was suggested to alleviate gender, racial, and socioeconomic barriers because it can be tailored to students' individual, cultural, racial, and diverse needs (Ross, 2016). Peer mentoring through Peer Group Connection (PGC) was described as the intervention

to ease the middle school to high school transition in a Baltimore City Public School. Ninety-nine students participated in the study. Forty-five students were in the non-mentored group and 54 students were in the mentored group. Correlational analysis and an independent sample t-test revealed the freshman minority experience. Girls experienced significantly higher social anxiety and first-generation Black girls (FGBG) were more likely to have a lower GPA when compared to boys. When mentored students were split by gender, there was a significant difference between girls' and boys' college and career readiness (CCR). Specifically, first-generation girls reported higher interpersonal skills and initiative. FGBG reported higher collaboration. Girls overall had a significantly higher GPA and social-emotional development than boys. Social capital was found to support peer mentoring through its interactions with GPA, social-emotional development, initiative, and social anxiety. Findings suggest that peer mentoring benefited FGBG, the same vulnerable group that was identified in the freshman minority experience.

These observations, along with student narratives, suggest that peer mentoring is a worthwhile investment because it facilitated positive academic, social, and CCR outcomes for the students who participated in PGC.

Chapter 1

The Middle School to High School Transition

Transitions are a turning point in development (Pickles & Rutter, 1991). Transitional events have the potential to alter lifelong changes in behavior, affect, cognition, and context (Pickles & Rutter, 1991). One such transitional event is the middle school to high school transition. Transitioning to a new school entails a degree of concern and anxiety for every student (Uvaas & McKevitt, 2013). However, the high school transition is unique because it coincides with significant shifts in human development that includes puberty, development of larger social networks, social cliques, and other social stresses (Cohen & Smerdon, 2009). Adolescents may experience exaggerated fears about interacting with older students and bullying (Cohen & Smerdon, 2009). While most freshmen attain support from their friends in middle school, some peer relationships may have been disrupted depending on how school districts structure their feeder schools (Langenkamp, 2010). Although adolescents' social and emotional concerns are often relieved through time, academic performance is often another concern for most students (Cohen & Smerdon, 2009).

High school is often divided in multiple academic tracks, with multiple teachers (Cohen & Smerdon, 2009). High schools tend be a larger organization, with more choices in their curricular and extracurricular offerings. For students who struggle academically, starting high school on a low academic track (remedial courses) with low academic performance often leads to a discourse in students' academic trajectories (Langenkamp, 2010). It can be argued that the most significant change from middle school to high school is the difficulty in coursework. In fact, it was found that freshmen are often

unprepared for the academic rigor that awaits them (MacIver & Epstein, 1992, as cited in Cohen & Smerdon, 2009). Due to adolescents' significant hormonal changes and reaction to the social, emotional, and academic stresses, students often exhibit frustration and anxiety that cause behavioral problems (Cohen & Smerdon, 2009). Leaving social, emotional, and academic issues unaddressed in high school usually impacts the likelihood of matriculation to college, going directly into the workforce, or dropping out of high school (Cohen & Smerdon, 2009).

To better understand the middle school to high school transition, the following literature review describes the effects of high school transition on adolescents.

The Effects of High School Transition

The middle school to high school transition can be debilitating. For example, in an examination of high school transition among 1,979 ethnically diverse adolescents from urban school districts, Benner and Graham (2009) surveyed students eight times during the Fall and Spring semesters from seventh to tenth grade. Results suggest that the middle school to high school transition led students to feel lonely across the first two years of high school with anxiety levels that stayed constant. Although some students excelled in their perspective middle schools, high school transition altered these students' positive academic and psychosocial life course trajectories, i.e., anxiety levels did not diminish, grades continued to decline, and absences increased (Benner & Graham, 2009). Negative effects (lower sense of school belonging, decrease in GPA, increase in absences) appeared immediately for minority students such as Black and Latino students, especially when the representation of their ethnic group dramatically declined from middle school to high school (Benner & Graham, 2009). Girls in the study had higher anxiety levels and

loneliness across the transition. Girls also experienced a decline in GPA at a faster rate than boys after the transition (Benner & Graham, 2009).

Other studies have found similar results. In a study of 41 eighth graders at a public, university affiliated, K-8 laboratory school in the Midwest, Isakson and Jarvis (1999) found that the high school transition process predicted lower GPAs at the end of the first semester of ninth grade, decreased students' attendance, and increased the number of reported stressors that students experienced (Isakson & Jarvis, 1999). In addition to having a lower sense of school belonging, the more stressors students reported at the beginning of ninth grade, the more likely students were to have a lower GPA at the end of the year (Isakson & Jarvis, 1999). Students who reported doing well in middle school also reported more anxiety, loneliness, and poorer academic achievement in high school (Isakson & Jarvis, 1999).

Langenkamp (2010) asserts that risk in social and academic development is propagated during the high school transition primarily because of the loss of social support from peers and teachers. Bonds that were made with middle school teachers are usually severed during the transition to high school (Langenkamp, 201). Without these bonds, freshmen are less likely to benefit from the tools that come about through relationship ties such as mentoring to protect from course failure (Langenkamp, 2010).

The importance of teacher relationships in students' academic and social development was elaborated by Barber and Olsen (2004). In a longitudinal study of 933 predominantly White middle class families in the Ogden City School District, Barber and Olsen (2004) found that compared to the elementary to middle school transition, the same students during their high school transition reported less liking of school, perceived the

need for school organization, experienced less support from teachers, principals and assistant principals, less monitoring from teachers, less classroom autonomy, less involvement in school activities, lower self-esteem, and showed higher depression rates. Evidence suggests that a decrease in students' personal and interpersonal functioning, i.e., self-esteem, depression, is primarily due to the perceived or actual changes in the social school environment, and that a lack of teacher-student relationships was the most predictive of students' reported functioning (Barber & Olsen 2004).

There is ample support for the claim that a successful high school transition can influence academic and social success throughout the high school experience and impact students' life course trajectories (Uvaas & McKevitt, 2013). Conversely, a negative high school transition can alter positive academic and psychosocial development (Benner & Graham, 2009). For example, students who do not successfully transition to high school and who report more stress than their peers are at risk of dropping out (Uvaas & McKevitt, 2013). Additionally, high school students who are frequently absent, have poor grades, experience discipline problems, report family problems, and who report feeling disconnected from school are also at risk of dropping out (Uvaas & McKevitt, 2013).

In sum, the literature mentioned effects on students' social, emotional, and academic development. These effects are often influenced by gender, race, and socio-economic status (Cohen & Smerdon, 2009; Benner & Graham, 2009).

Contributing Factors

Gender

The transition from middle school to high school is marked by the increase in peer networks, peer crowd affiliation, and peer relations (La Greca & Prinstein, 1999). In fact,

close friends become the primary source of social support and contribute to adolescence self-concept and well-being (Bishop & Inderbizen, 1995; Furman & Buhrmester, 1992). Problematic peer relationships play a significant role in maladaptive emotional functioning, including depression and social anxiety (La Greca, Davila, & Siegel, 2008). Social anxiety in particular has been recognized as an important factor that inhibits or impedes adolescents' interpersonal functioning (La Greca & Lopez, 1998). Social anxiety is associated with behavior inhibition and social withdrawal, which may impede the formation for adolescents to form successful relationships with peers (La Greca & Lopez, 1998).

In a study of 250 high school students from grades 10 through 12, La Greca and Lopez (1998) observed connections between adolescents' social anxiety and interpersonal functioning. La Greca and Lopez (1998) found that adolescents who reported higher levels of social anxiety felt less accepted and supported by their classmates and felt less attractive. Additionally, La Greca and Lopez (1998) found that adolescent girls appeared to have greater concerns about feelings of social inadequacy when compared to boys (La Greca & Lopez, 1998).

In a study of 320 ninth grade students, Akos and Galassi (2004) found that girls felt less connected to their high school than boys. Girls reported more concerns regarding social and academic changes, experienced greater drops in self-esteem, and less dependence on family support (Akos & Galassi, 2004). Akos and Galassi (2004) also found significant differences in achievement and perception of how difficult high school transition was among Latino students. Latino students experienced greater losses in academic achievement in the first year of transition and reported the transition to be more

difficult when compared to White and Black students (Akos & Galassi, 2004). Akos and Galassi (2004) suggest that these trends may have been related to gaps in language and literacy skills and limited parental involvement.

In a national representative sample of seventh through twelfth grade girls, Cavanagh, Riegle-Crumb, and Crosnoe (2007) utilized the 1995 *Adolescent Health and Academic Achievement Study* to survey approximately 90,000 young people. Through different waves of data cleansing, a total of 4,653 girls' longitudinal interview and transcript data were used to analyze the social psychological implication of pubertal timing on girls' education. Results highlight the impact of adolescent female development during high school transition. Girls in the study who matured earlier had lower overall GPAs and were more likely to have failed a course (Cavanagh et al., 2007). These course failures affected girls' academic standing in ninth grade especially if the course was not remediated (Cavanagh et al., 2007). Early maturing girls were much less likely to graduate from high school (Cavanagh et al., 2007). Early maturing girls who did graduate, had lower GPAs. These findings suggest that pubertal timing, even after accounting for race/ethnicity, family structure, and parent education, was associated with girls' academic trajectories at the start of high school (Cavanagh et al., 2007).

Socioeconomic Status

Socioeconomic status and the impact of school supports were investigated in a sample that consisted of 205 Mexican-origin sophomores, juniors, and seniors from six high schools in the San Francisco - San Jose area. A school-wide questionnaire survey was administered during the 1987-1988 academic year by a related Stanford University project. Stanton-Salazar and Dornbusch (1995) used social ties or networks to represent

social capital and explored (a) whether a tie or a network is oriented toward providing institutional support, (b) the quality of the resources provided, and (c) the degree to which support is tailored to the needs of the individual. Stanton-Salazar and Dornbusch (1995) found that students with higher socioeconomic status significantly reported greater access to school-based social capital. Additionally, Stanton-Salazar and Dornbusch (1995) found that access to adult social capital appeared to increase as grade level goes up. Stanton-Salazar and Dornbusch (1995) found that for many students of working-class and minority backgrounds, school personnel often represent the most readily available source of professional-based information. The study suggests that relationships with teachers and adults may be a significant predictor for success in school, but students with low socioeconomic backgrounds may have less access to this resource (Stanton-Salazar & Dornbusch, 1995).

Poverty in Baltimore. The context of this dissertation is in Baltimore City, Maryland, where poverty is usually synonymous with crime. In the start of the year, there were 26 homicides in the first 25 days in Baltimore (George, 2017). Total shootings were up 44% compared to the same time last year, homicides were up 50%, and car theft is up more than 60% for the period (George, 2017). This unusual surge in crime traces back to the unrest that occurred in reaction to Freddie Gray's death while in the back of a police van in April, 2015 (George, 2017). The rioting and unrest was projected to cost the city of Baltimore $20 million (Wenger, 2015). Governor of Maryland, Larry Hogan asked President Barack Obama to issue a disaster declaration to help the state attain reimbursement for some of the expenses (Wenger, 2015). The $20 million estimate does not include assisting the 380 businesses damaged during the unrest, nor the $16 million in

police salaries due to overtime costs (Wenger, 2015). Homicides in Baltimore jumped from 211 in 2014 to 344 in 2015, and 318 in 2016 – the most per capita in the city's history (George, 2017). In George's (2017) article, Chief of Patrol, Lt. Col. Osborne Robinson stated that "students are growing up in situations that most of us don't" (para. 23).

As citizens of Baltimore came together to clean-up the community after the unrest, many have highlighted one of the underlying issues in the city: desperate poverty (Gray, 2015).

Of the 80,000+ students in the Baltimore City Public Schools System (BCPSS), 84% of students are poor enough to qualify for free or reduced-price school lunch (Gray, 2015). As reported by the 2009-2013 U.S. Census report, almost a quarter of Baltimore residents live below the poverty line (Gray, 2015). In 2009, 29.4% of children were living below the poverty line (Gray, 2015). According to U.S. Census Data between 2007 and 2009, Baltimore is one of the top cities to receive food stamps (Gray, 2015). In Freddie Gray's neighborhood, 51.8% of the residents were unemployed between 2008 and 2012, and the median income was $24,006 per year. One-third of the buildings in this area were vacant (Gray, 2015).

Poverty is a critical risk factor for many mental, emotional, and behavioral disorders of children and youth (National Research Council & Institute of Medicine, 2009). In communities and nations whose annual GDP per capita exceeds $5,000, income inequality most strongly predicts life expectancy (Kawachi, Kennedy, & Wilkinson, 1999). Low income is associated with low parent investments of time and money in their children's learning (Gershoff, Aber, Raver, & Lennon, 2007). Perceived material

deprivation strongly predicts parenting stress and harsh or unresponsive parenting and children's social/emotional development (Gershoff et al., 2007).

Poverty and Schools. Many studies have associated poverty with a range of negative outcomes for children including physical health, language, cognitive development, academic achievement, educational attainment, and mental, emotional, and behavioral health (Yoshikawa, Aber, & Beardslee, 2012). The causal influence of poverty is complex due to how it is intertwined with a large number of co-factors that may be determined in prior generations (Yoshikawa et al., 2012). For example, low school attainment and teen parenting increases adolescents' chances of raising their children in poverty (Yoshikawa et al., 2012). Education, achievement, and family structure in one generation can therefore become determinants of poverty and impact children's health and development in the next generation (Yoshikawa et al., 2012). Other correlates of poverty include, but are not limited to, distressed neighborhoods, persistently low-performing schools, and less nutritious food supplies (Yoshikawa et al., 2012). Literature and scientific evidence appear to suggest that poverty has a causal influence on the mental, emotional, and behavioral health of children (Yoshikawa et al., 2012).

Schooling, parental work, and neighborhood conditions can link poverty to children's mental, emotional, and behavioral health (Yoshikawa et al., 2012). Children function under their parents' care, school placement, and community environments (Chase-Lansdale & Pittman, 2002). Children in poverty are less likely to experience positive school climates and effective instructional strategies (Yoshikawa et al., 2012). In Baltimore, schools are often too hot or too cold (Bowie, 2016). Water in BCPSS was found to have high concentrations of lead, which may have caused students to have lead

poisoning (Bowie, 2016). These school factors have been linked to student social maladjustment and behavior problems (Pianta & Stuhlman, 2004).

Theoretical Framework

Pasricha (2014) suggests that any form of success requires three forms of capital: human, financial, and social. Human capital includes constructs such as race, age, and gender. Financial capital can be defined in terms of socio-economic status, or the financial resources that a student has. Pasricha (2014) and the Center for Promise (2015) both claim that social capital (or the relational assets), is the most important. In fact, social capital is the form of capital over which a person has the most control (Pasricha, 2014). In school, social capital has been found to affect educational achievement (Putnam, 2000). Understanding how social capital contributes to students' academic success can be beneficial for educators, parents, and community leaders as they create interventions to improve academic outcomes (Acar, 2011).

Social Capital

Social capital is not a single entity, but a variety of different entities that facilitates certain action(s) from an actor(s) within a structure (Coleman, 1988). Similar to other forms of capital, social capital makes it possible for an individual to achieve certain ends that would not have been possible without it (Coleman, 1988). There are three different forms of social capital to emphasize how social relations can be used as a resource for an individual (Coleman, 1988).

Obligations, Expectations, and Trustworthiness of Structures. The first type of social capital is the obligations, expectations, and trustworthiness of structures. For example, if Sam does a favor for Gary and Sam trusts Gary to reciprocate the favor in the

future, Sam will have an expectation for the favor to be paid back and an obligation for Gary to do so. This obligation can be referred to as a "credit slip" to be held by Sam. If Sam holds a large number of credit slips, then Sam has social capital to use at his disposal (Coleman, 1988). However, without trust, Sam's wealth of credit slips is useless (Coleman, 1988). In a structure where there are forms of hierarchy such as school, years of experience are usually synonymous to having extensive credits that are readily available for use that were formed primarily with trusting relationships (Coleman, 1988).

In high school, credit slips usually entail the presence of supportive peer relationships. Adolescents who have supportive peer relationships report variables that facilitate trust and credit slips. For example, adolescents with supportive peer relationships report higher levels of peer acceptance, increased social competence, higher levels of motivation, active school involvement, increased levels of self-worth, leadership skills, and improved school performance (Hansen, Giacoletti, & Nangle, 1995; Savin-Williams & Berndt, 1990). On the other hand, social isolation may increase vulnerability to negative psychosocial outcomes such as decreased self-esteem and increased depressive symptoms (Hall-Lande, Eisenberg, Christenson, & Neumark-Sztainer, 2007).

Information Channels. The second type of social capital is information channels. According to Coleman (1988), information is costly, requires attention, and is always scarce in supply. For example, Coleman (1988) states that a researcher who needs to be up-to-date with relevant research in related fields can use everyday interactions with colleagues to do so. Similarly, a student who is absent from school can rely on their peers to gain access to assignments. These examples are forms of social capital in the form of information that facilitates action (Coleman, 1988). The entity in this scenario is not the

value of credit slips, but the essential information that is useful for the recipient (Coleman, 1988).

Norms and Effective Sanctions. The last type of social capital is norms and effective sanctions. Norms are a powerful, sometimes fragile, form of social capital (Coleman, 1988). For example, norms that inhibit crime benefit its population by being able to walk outside at night and enable old persons to leave their houses without fear for their safety (Coleman, 1988). In schools, norms that provide support and reward its students for excellence greatly facilitates the school's task to award recognition (Coleman, 1988). On the other hand, a school that does not have a norm to recognize students will make it easier for staff to put recognition to the side or dismiss it completely (Coleman, 1988).

Social Capital and Socioeconomic Status

From Bourdieu's perspective, social and cultural capital and its influence on educational achievement are centralized in economic capital (Rogosic & Barnovic, 2016). Bourdieu (1986) suggests that individuals' achievements are largely determined by socioeconomic status. Bourdieu's (1986) conceptualization of social capital is more pessimistic in nature than Coleman's (1988). According to Bourdieu (1986), social capital is dependent upon the family, i.e., level of education, whereas Coleman (1988) acknowledges the impact of the family and beyond the family (Rogosic & Barnovic, 2016). Although this paper will utilize Coleman's (1988) conceptualization of social capital, it is important to acknowledge Bourdieu's (1986) position in that socioeconomic status is influential.

Operationalization of Social Capital

Research lacks clarity in how to measure or operationalize social capital (Gaddis, 2012). Although literature suggests that social capital leads to numerous positive outcomes, it also does not provide a clear explanation of what is important in the creation of social capital (Gaddis, 2012). There is no unanimous definition of social capital (Acar, 2011). Thus, social capital is important, but not a well understood concept (Gaddis, 2012). Nevertheless, Coleman's (1988) conceptualization of social capital is one of the most cited and most influential (Acar, 2011). Utilizing social capital as a framework has been seen as a flexible tool that can be used in a wide array of institutions, including education (Acar, 2011).

Social Capital and the High School Transition

Many have utilized and confirmed the role of social capital in establishing social mobility (Rogosic & Baranovic, 2016). This was confirmed by Coleman himself when he published a comprehensive study on social capital and high school education based on a national representative sample, famously known as the Coleman Report (Rogosic & Baranovic, 2016). The Coleman Report shed light on the role of socioeconomic status in adolescents' education (Rogosic & Barnovic, 2016). The Coleman Report found that zip code was more influential in determining the quality of education that students receive than race or ethnicity (Rice & Alexander, 2013). Rural and urban schools were more found to be more inferior to suburban schools (which rely on location) and that family characteristics and involvement makes more of a difference than school resources (Rice & Alexander, 2013). From the quality of teachers, curriculum, school resources, and student racial mix, socioeconomic diversity among students in school was the most

influential factor in producing positive academic outcomes (Rice & Alexander, 2013). These findings highlight a dilemma in cities across the United States where there is a concentration of poverty, low performing schools, and minimal parental engagement (Rice & Alexander, 2013). In areas where such concentration exists such as Baltimore, schools and institutional agents are put in a position to produce creative interventions to move students toward achievement (Rice & Alexander, 2013).

Defining a Successful Middle School to High School Transition

President Obama challenged every American to pursue at least one year of vocational or college training by 2020 (The White House, 2014). First Lady Michelle Obama's *Reach Higher Initiative* has been a national push to enhance college and career readiness (CCR) of high school students, mostly spearheaded by the American School Counselor Association (ASCA), school counselors nationwide, and the Education Trust. The critical role of school counselors in assisting students with academics, CCR, and postsecondary planning has been in the forefront (ASCA, 2012). A successful middle school to high school transition prepares students to become college and career ready.

Defining College and Career Readiness. Academic success can be measured in different ways. However, the widespread adoption of the Common Core State Standards (CCSS) has enabled conversations about what prepared students look like (Mishkind, 2014). As the CCSS outline a set of academic expectations for CCR, definitions differ by state (Mishkind, 2014). A review of each definition yields insight into state priorities and nationwide trends (Mishkind, 2014).

Although Conforti (2013) identifies Maryland as a state that does not have an official state definition of what it means to be college and career ready, the Elementary

and Secondary Education ACT (ESEA) included a definition of CCR. Mishkind (2014) summarized Maryland's definition of CCR found in the U.S Department of Education's (2012) flexibility request.

Mishkind (2014) states that:

> CCR includes mastery of rigorous content knowledge and the abilities to apply that knowledge through higher-order skills to demonstrate success in college and careers. This includes the ability to think critically and solve problems, communicate effectively, work collaboratively, and be self-directed in the learning process. More specifically, a student who is college and career ready should: be prepared to succeed in credit-bearing postsecondary introductory general education courses or in industry certification programs without needing remediation; be competent in the Skills for Success (SFS) (included learning, thinking, communication, technology, and interpersonal skills); have identified potential career goals and understand the steps to achieve them; and be skilled enough in communication to seek assistance as needed, including student financial assistance. (p. 10)

School Counseling and College and Career Readiness. Within the context of CCR, social capital refers to a student's access to knowledge and resources about postsecondary education via family members, school counselors, teachers and friends (Coleman, 1988; Cholewa, Burkhardt, & Hull, 2016). Because of the school counselors' skill set, they are uniquely positioned to supplement students' access to college by increasing the necessary social capital required to make informed and calculated decisions (Bryan et al., 2011). In fact, students who accessed college information from their school counselors were more likely to apply and enroll in college (Bryan et al, 2011). Bryan et al. (2011) found that students in the lowest socioeconomic status quartiles who did not have a counselor contact had significantly lower odds of applying to two or more colleges.

Having high student to counselor ratios is a detriment to students' college preparation (McKillip, Rawls, & Barry, 2012). ASCA (2012) recommends 250 students

to 1 school counselor ratio. Hurwitz and Howell (2014) emphasize the need for school counselors due to the positive association between the number of school counselors and four-year college going rates. The College Board National Office for School Counselor Advocacy [NOSCA] (2012) indicated that public school counselors had higher student to counselor ratios than their peers working in private schools. Private school counselors spend 28% more time on postsecondary counseling than public school counselors (Clinedinst, 2015). Moreover, Bryan, Holcomb-McCoy, Moore-Thomas, & Day-Vines (2009) found that Black and female students were more likely to see their school counselor about college, but students from larger schools with fewer counselors and schools with higher populations of students on free and reduced lunch were less likely to do so. NOSCA (2012) purports that schools with higher numbers of students of color and higher numbers of students on free and reduced lunch also had higher student to counselor ratios. As such, McDonough (1997, 2005) indicated that schools with a high number of low-income students or students of color were less likely to provide college counseling due to the large number of caseloads. Therefore, not having a school counselor or having high student to counselor ratios greatly impedes underrepresented and low income students to access college counseling (Cholewa et al., 2016).

Social Capital, High School Transition, and College and Career Readiness

The influence of relationships cannot be ignored as literature has associated social capital with establishing social mobility (Rogosic & Baranovic, 2016). Bryan et al., (2011) in particular utilized school counselors as information channels to predict students' college application rates. Stanton-Salazar and Dornbusch (1995) used social ties or networks to represent social capital and found that students with low

socioeconomic status significantly reported less access to school-based social capital. As the majority of students in Baltimore are experiencing the detrimental effects of poverty, whether it is crime or fewer supports in school, it is inevitable to suggest that interventions that attempt to ease the negative effects of the middle school to high school transition may impact CCR. For example, alleviating students' social anxiety levels may facilitate positive interpersonal functioning, thus facilitate positive academic gains (La Greca & Lopez, 1998). Figure 1.1 utilizes social capital as a framework to illustrate the hypothesized relationships between gender, race, and socioeconomic status (and the many associations it has on education), social capital, high school transition, and CCR. Social capital will be discussed further in Chapter 2 and 4; however constructs throughout this chapter were placed in areas that corresponded with Coleman's (1988) definitions of social capital.

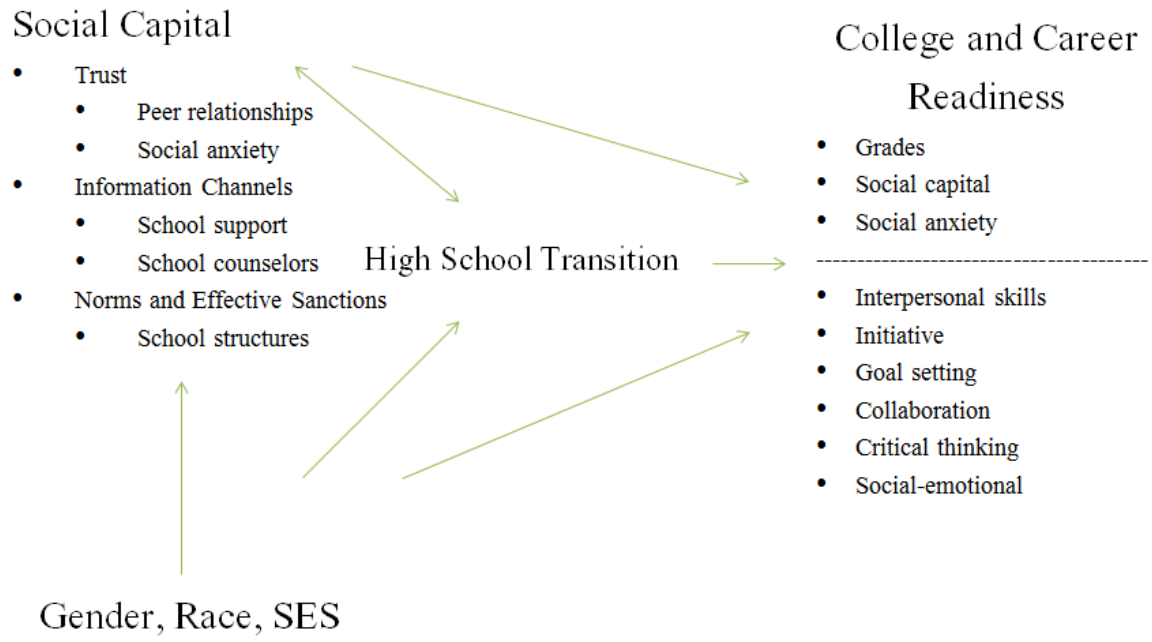

Figure 1. 1. Hypothesized relationships between poverty, social capital, high school transition, and college and career readiness.

Problem of Practice

In an examination of transition programs and services provided from the Education in the Middle Grades survey that was sent to 2,400 principals of seventh grade students, results found that the three most common transition practices were (a) students touring of a new school, (b) having teachers from both schools meet, and (c) having counselors in the new school meet with staff in the old school (MacIver & Epstein, 1991). From the three most common transition practices stated above, only one approach directly included students. Additionally, transition support was commonly provided before school started rather than after students matriculated into the new school (MacIver & Epstein, 1991). However, principals also reported greater student retention and lower dropout rates when additional transition programs were implemented (MacIver & Epstein, 1991). MacIver and Epstein (1991) lend support to the claim that group advisory periods, interdisciplinary teacher teaming, students attending classes in the new school before transition, summer meetings between students and high school teachers, and buddy programs were all effective transition practices that helped students adjust to the new school (MacIver & Epstein, 1991).

On the basis of the literature discussed, it can be argued that high school transitional supports should emphasize students' social development after matriculation to high school to facilitate academic success throughout the freshman year and beyond. Schools who are proactive at implementing programs to increase connections between staff and students report more positive academic outcomes than schools that fail to make additional efforts (Creech, 2000). The Center for Promise (2015) published a report from the perspective of young people about the roles that relationship with adults and peers

play in academic success. The Center for Promise (2015) suggests engaging young people as peer supporters and to invest in building relationships and leveraging students' strengths. The Center for Promise (2015) specifically recommended the Center for Supportive Schools (CSS) as a key resource because of its evidence-based solutions.

This dissertation will utilize social capital as a theoretical framework to explore how CSS' peer mentoring program called Peer Group Connection (PGC) can help to ease the negative effects of the middle school to high school transition at a Baltimore City Public School named School X. As gender, racial, and socioeconomic influences throughout this chapter demonstrated to be contributing factors, Stanton-Salazar (1997) suggests that there is a need for programs that facilitate help-seeking behaviors, supportive ties to peers, collaborative learning and formation of pro social, supportive relations that break down gender, racial, and socioeconomic barriers. PGC is hypothesized to alleviate these gender, racial, and socioeconomic barriers because it can be tailored to students' individual, cultural, racial, and diverse needs (Ross, 2016).

Chapter 2

Needs Assessment

The literature discussed in Chapter 1 explored how the high school transition may impact student's academic, social, and life course trajectories. Subsequently, the literature on gender, race, socioeconomic status and social capital suggests that there is an interplay between these constructs and the high school transition. It was hypothesized, as illustrated in Figure 1.1 that easing the negative effects of the middle school to high school transition may influence positive short term and long term outcomes in the areas of academics, social-emotional development, and CCR. The purpose of this chapter is to establish stronger connections between academics, social capital, and high school transition. To provide an empirical examination of these factors, the following research questions were investigated in this chapter:

RQ1: To what extent is there a need for more school supports at School X?

RQ2: To what extent is there an association between social capital and grades?

RQ3: To what extent is there a link between social capital and high school transition?

Needs Assessment Part I

Needs Assessment Part I explored to answer RQ1: To what extent is there a need for more school supports at School X.

Methods

This section includes a description of the participants and the instruments used for the Needs Assessment Part I.

Participants

School X is a magnet, highly selective, public high school in Baltimore, Maryland that emphasizes in science, technology, engineering, and mathematics (STEM). According to the Maryland Report Card (2016), School X had approximately 1512 students enrolled in the 2015-2016 school year (70% Black, 18% White, 6% Hispanic, 5% Asian, and 1% Biracial). In 2015, 50% of the student body was eligible for free or reduced lunch and about 61% in 2014. Although less than 5% of the student body participates in special education almost every year, School X enrolls about 50 students per incoming class to participate in the only gifted and talented program available in BCPSS for high school students called the Ingenuity Project.

A four-year profile of School X's class of 2017's failure rates and a five-year GPA profile of seniors from the class of 2013 – 2017 was reviewed.

Instruments

The primary instruments used for Needs Assessment Part I were failure rates and GPA.

Failure Rates. Failure in a course is considered to be an F or a 59%. The lowest passing grade in BCPSS is a D- or 60%. Failure rates are produced at the end of the year which is based on the final grade that students receive. Not passing a course means that the student did not receive a course credit. Students who do not attain a credit are advised to remediate the course during summer school.

GPA. GPA calculations in BCPSS do not make a distinction for plus or minus grades. Unweighted GPA is the average of the quality points associated with the letter grade received (A (90% - 100%) = 4, B (80% - 89%) = 3, C (70% - 79%) = 2, D (60% -

69%) = 1, F (59 or below) = 0). The highest unweighted GPA that student can receive is a 4.0 GPA.

Procedures

This section includes data collection and data analysis used.

Data Collection

Failure rates were generated from School X's student information system, Infinite Campus, where all student information is kept including final grades and teachers' grade books.

To view GPA trends, a five-year unweighted GPA profile was accessed through School X's college application management system in Naviance.

Data Analysis

The class of 2017's failure rate and frequency of students' GPAs from the class of 2013 – 2017 were generated through Infinite Campus and Naviance. Data was compiled in an Excel database worksheet for analysis.

Results

Failure Rates

As summarized in Table 2.1, the class of 2017 consisted of 378 students. After their freshman year in the 2013-2014 school year, 17% (n = 68) failed at least one or more classes. In the following year of June 2015, 21% (n = 81) failed at least one or more classes during their sophomore year in the 2014-2015 school year. During the junior year in the 2015-2016 school year, 23% (n = 84) failed at least one or more classes. At the end of their senior year, 21% (n = 75) failed at least one or more classes. Eighteen students in the class of 2017 did not meet the Maryland state graduation requirements.

Table 2. 1

Class of 2017 Failure Rates

Year	N	Failure Letters Sent	Percentage
Freshman	378	68	17%
Sophomore	376	81	21%
Junior	359	84	23%
Senior	350	75	21%

Note. Eighteen students from the class of 2017 did not meet the Maryland state graduation requirements.

GPA

Table 2.2 illustrates the academic profile of the class of 2013, 2014, 2015, 2016 and 2017 at the start of the senior year, before college applications were prepared by students. The profile illustrates that close to 50% of the graduating class for the past five years have an unweighted GPA of a 2.4 or below (a letter grade of a C average).

Table 2. 2

Academic Profile of Seniors (2013-2017)

GPA Range	# of Students (2017)	# of Students (2016)	# of Students (2015)	# of Students (2014)	# of Students (2013)
3.5 +	42 (12%)	38 (11%)	26 (7%)	32 (8%)	31 (7%)
3.0 – 3.4	58 (16%)	52 (16%)	52 (14%)	43 (11%)	45 (10%)
2.5 – 2.9	93 (26%)	89 (26%)	86 (25%)	78 (19%)	97 (21%)
2.0 – 2.4	90 (25%)	87 (25%)	82 (24%)	88 (22%)	95 (20%)
1.9 – 1.5	52 (14%)	52 (15%)	48 (14%)	98 (24%)	
					196 (42%)
1.4 below	25 (7%)	25 (7%)	54 (16%)	63 (16%)	
N	360	343	348	402	464

Note. 46% of the students in the class of 2017 have a 2.4 or below at the beginning of their senior year, 47% in the class of 2016; 54% in the class of 2015; 62% in the class of 2014 and 2013.

Summary

The number of students in the class of 2017 that failed one or more courses during their career at School X indicated percentages that are too high. Table 2.2 posits a concern due to students' ineligibility for need based aid such as the Maryland Guaranteed Access Grant, which awards income eligible students with a 2.5 unweighted GPA about an $18,000 renewable grant. According to Table 2.2, if all students were eligible for the grant, only about half of them would receive aid. Data from the Needs Assessment Part I (course failure and academic profile of seniors) suggests that there is a need for additional supports that facilitate positive academic outcomes for students.

Limitations

Needs Assessment Part I could benefit from a more comprehensive picture of failure rates from ninth through twelfth grade. Additionally, although quantitative methods highlight a problem, it does not provide students' (or parents and teachers) perspectives on why they failed the course. Nonetheless, the Needs Assessment Part I highlights how course failure in the ninth grade contributes to students' overall GPAs in the senior year. Data suggests that students in School X could benefit from supports that facilitate positive academic outcomes.

Needs Assessment Part II – Social Capital and Grades

Needs Assessment Part II explored to what extent social capital may be a vehicle to facilitate positive academic outcomes for students and answer RQ2: To what extent is there an association between social capital and grades?

Methods

This section includes a description of the participants, recruitment, and the instruments used for the Needs Assessment Part II.

Participants

The participants in the Needs Assessment Part II were from School X.

Recruitment. The primary method for recruitment and participation was in the form of an announcement during sophomore classroom guidance lessons in American Government classes during March, 2015. The announcement took approximately five minutes to state the purpose of the study, provide an overview of the sections in the student assent and parent consent form, and to answer questions. Overall, approximately 375 sophomore students heard the announcement.

The second method for recruitment and participation was in the form of an announcement in freshmen-level classes in Biology, Foundations of Technology, World History, and Physical Education. Approximately 150 freshmen students received information on how to access the surveys and how to complete them. The announcement procedures were similar to the one provided in the American Government classes.

Instruments

There were two instruments used: (a) Student Views about High School Transition Survey and (b) Social Capital Score.

Student Views about High School Transition Survey. The primary instrument used was the Student Views about High School Transition Survey (SVHSTS). The SVHSTS (Appendix A) asked students about their demographic information, students' views about the services offered at School X, social capital, and involvement in

extracurricular activities. Generational college status was also collected. For the purposes of this dissertation, first-generation college status is defined as a student whose parent(s) or guardian(s) have not completed a bachelor's degree.

Social Capital Score. A social capital score was computed to quantify students' level of social capital. The Social Capital Score consisted of the average of three questions from the SVHSTS. From highly agree to highly disagree (5 = highly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = highly disagree), students indicated their responses to the following questions:

(a) Do you feel supported at School X socially?

(b) Do you feel a sense of community at School X?

(c) Do you have a support network?

Procedures

The procedures section includes data collection and data analysis.

Data Collection

Students were told that they must have parent consent before participation. Students were able to access the SVHSTS through a Google form that was linked to School X's school website. As an incentive, students were able to redeem a snack in a snack box upon completion of the survey and submission of their student assent and parent consent form.

Data Analysis

All data collected was stored and analyzed through Statistical Package for the Social Science (SPSS). A frequency analysis and a bivariate correlation were the only statistical analyses used in the Needs Assessment Part II.

Results

Frequencies

Participation in the needs assessment by ethnic group was as follows: Asian (*n* = 9), Black (*n* = 32), Hispanic (*n* = 6), Multiracial (*n* = 3), and White (*n* = 9). There were slightly more non-first-generation college students (NFGS) (*n* = 31) than first-generation college students (FGS) (*n* = 28). Grade level participation was predominantly in the sophomore class (*n* = 38), followed by freshmen (*n* = 11), juniors (*n* = 8), and seniors (*n* = 2). There were more girls (*n* = 42*)* than boys (*n* = 17) that participated. Participants' verified unweighted and weighted average GPAs were moderate (*M* = 3.18 unweighted GPA, *SD* = .653; *M* = 3.33 weighted GPA, *SD* = .684). Total participants were 59 students. Figure 2.1 is a summary of participants' demographic information.

Ethnicity	*n*
Asian	9
Black	32
Hispanic or Latino	6
Multiracial	3
White	9
Generational Status	*n*
NFGS	31
FGS	28
Grade Level	*n*
Freshman	11
Sophomore	38
Junior	8
Senior	2
Gender	*n*
Male	17
Female	42
GPA	*M*
Unweighted	3.18
Weighted	3.33

Figure 2. 1. Demographic information of participants in Needs Assessment Part II.

Demographics and GPA

Ethnic groups were dummy coded (0 = Black, 1 = Asian, Hispanic, Multiracial, and White). There was a significant interaction between ethnicity and unweighted ($r(59) = .462$, $p < .01$) and weighted ($r(59) = .471$, $p < .01$) GPAs suggesting that Black students in the sample were more likely to have lower unweighted and weighted GPAs than the rest of the sample population.

Extracurricular Activities and GPA

Students' unweighted ($r(59) = .509$, $p < .01$) and weighted ($r(59) = .531$, $p < .01$) GPAs were positively correlated with extracurricular activities, suggesting that the more involved students were in extracurricular activities, the higher their grades seemed to be. Black students in the sample were less likely to participate in extracurricular activities than the rest of the sample population ($r(59) = .299$, $p < .05$). Results suggest that extracurricular activities are associated with having higher academic performance, but Black students in the sample tended to not reap the benefits of participating in extracurricular activities.

Family Support and GPA

Family support (the question: who encourages you to do well in school the most?) was dummy coded (0 = outside of family, 1 = family). There was a significant correlation between unweighted ($r(59) = -.471$, $p < .01$) and weighted ($r(59) = -.465$, $p < .01$) GPAs and family support, indicating that GPA tends to go up if students perceived that they were most encouraged by someone outside of the family. Additionally, there was a significant negative correlation between family encouragement and the number of extracurricular activities that students participated in ($r(59) = -.348$, $p < .01$), signifying

that students who indicated they receive more encouragement outside of the family, also tended to participate in fewer extracurricular activities.

Table 2.3 provides a summary of the correlations between demographics, GPA, activities, and family support.

Table 2. 3

Interactions Between Demographics, GPA, Activities and Family Support

		Ethnicity	UGPA	WGPA	Activities	Family Support
Ethnicity	Pearson Correlation	1	.462**	.471**	.299*	-.176
	Sig. (2-tailed)		.000	.000	.021	.182
	N	59	59	59	59	59
UGPA	Pearson Correlation	.462**	1	.991**	.509**	-.471**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	59	59	59	59	59
WGPA	Pearson Correlation	.471**	.991**	1	.531**	-.465**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	59	59	59	59	59
Activities	Pearson Correlation	.299*	.509**	.531**	1	-.348**
	Sig. (2-tailed)	.021	.000	.000		.007
	N	59	59	59	59	59
Family Support	Pearson Correlation	-.176	-.471**	-.465**	-.348**	1
	Sig. (2-tailed)	.182	.000	.000	.007	
	N	59	59	59	59	59

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

Social Capital, School Support, and GPA

There was a significant correlation between social capital and students' answer to question seven of the SVHSTS, where students gave a yes or no response to whether or not they felt academically supported at School X ($r(57) = .728$, $p < .01$). Data appears to suggest that students with higher social capital have higher perceptions of academic support from the school. Additionally, students who indicated that they felt academically

supported by the school were more likely to have higher unweighted ($r(57) = .353$, $p < .01$) and weighted ($r(57) = .352$, $p < .01$) GPAs**.** Results suggest that social capital yields higher academic development from the supports available at school whereas support from the family did not have the same interaction.

Table 2.4 is a summary of the correlations between social capital, academic support, family support, and GPA.

Table 2. 4

Interactions between Social Capital, Support, and GPA

		Social Capital Score	Academic Support	UGPA	WGPA	Family Support
Social Capital Score	Pearson Correlation	1	.728**	.243	.231	-.016
	Sig. (2-tailed)		.000	.064	.079	.903
	N	59	59	59	59	59
Academic Support	Pearson Correlation	.728**	1	.353**	.352**	.032
	Sig. (2-tailed)	.000		.006	.006	.813
	N	59	59	59	59	59
UGPA	Pearson Correlation	.243	.353**	1	.991**	-.471**
	Sig. (2-tailed)	.064	.006		.000	.000
	N	59	59	59	59	59
WGPA	Pearson Correlation	.231	352**	.991**	1	-.465**
	Sig. (2-tailed)	.079	.006	.000		.000
	N	59	59	59	59	59
Family Support	Pearson Correlation	-.016	.032	-.471**	-.465**	1
	Sig. (2-tailed)	.903	.813	.000	.000	
	N	59	59	59	59	59

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

Summary

Results suggest that academic success, as measured by GPA, is associated with extracurricular activities. GPA is more likely to increase when students are involved in extracurricular activities. Students who have higher GPAs are more likely to seek

encouragement outside of the family, but those students tend to participate in fewer extracurricular activities. Black students in the sample were more likely to have lower GPAs and were less likely to participate in extracurricular activities. Results indicated that extracurricular activities are associated with having higher academic performance, but Black students in the study tended to not reap the benefits of participating in extracurricular activities as much as the rest of the sample population.

The results appear to suggest that students in the sample relied on outside resources of the family to navigate the academic life of school at the expense of participation in extracurricular activities. Perhaps students in the sample felt that there was a disconnect between school and family life such as homework difficulty and the ability for family to assist or provide help.

Social Capital

Students with higher social capital were more likely to feel academically supported at school. Students who felt academically supported at school were more likely to have higher GPAs. Additionally, students who were encouraged to do well in academics outside of the family also were more likely to have higher GPAs. The Needs Assessment Part II suggests that social capital yields higher academic development. Social capital facilitated students to reap the benefits that come from academic supports available at school when supports available at home are insufficient.

Findings were consistent with the literature discussed in Chapter 1. Family background such as socioeconomic status may impact the mount of social capital available to students in their sphere of influence (Bryan et al., 2011). Social capital from parents who come from higher socioeconomic backgrounds have more access to

information about the college admissions process and navigating postsecondary opportunities (Bryan et al., 2011). Students from low socioeconomic backgrounds, working-class, and minority backgrounds have to rely on other means of social capital which are usually available in school (Bryan et al., 2011; Stanton-Salazar & Dornbusch, 1995).

Needs Assessment Part II emphasizes the importance of school supports and is consistent with the literature discussed regarding the detrimental effects of having no school counselors or high student to school counselor ratios. Not having a school counselor or having high student to counselor ratios greatly impedes underrepresented and low income students to accessing college counseling (Cholewa et al., 2016). School counselors have been found to be a source of social capital (Bryan et al., 2011) and the Needs Assessment Part II indicated an empirical association between social capital, school support, and grades.

Limitations

Although the goal of the needs assessment was successful in linking constructs to one another, there is a limitation on the operationalization of social capital that was used. Research lacks clarity in operationalizing social capital (Gaddis, 2012). Social capital is important, but not a well understood concept (Gaddis, 2012). Utilizing social capital as a framework has been seen as a flexible tool, but validity and reliability concerns are prominent. To control for reliability, the Social Capital Score was computed by averaging three questionnaire items to produce a composite score. A composite score was calculated in order to strengthen a reliable measurement of social capital. The composite score takes into account multiple items rather than making assumptions based solely on

one question. Future studies must account for inter-item reliability or calculate a Cronbach's alpha to determine if these items act as a unified construct. Nevertheless, the needs assessment yielded associations that were informative to the overall understanding of the POP and methods to utilize in the future.

The participants in the study did not represent the majority of the student population as described in Table 2.2, where more than 50% of the graduating class had a 2.4 GPA or below. There were only two participants in the study that had less than a 2.4 GPA. Most students included in the study were in the top 10% of their class, some receiving gifted and talented educational programming. To strengthen the generalizability and to identify reliable results, it will be necessary to increase the participant pool and to include students who have a 2.4 GPA or below. Nonetheless, the needs assessment made connections between social capital, academics, and the need for more school support at School X.

Needs Assessment Part III - Social Capital and High School Transition

This section explores the relationships between social capital and high school transition to answer RQ3: To what extent is there a link between social capital and high school transition?

Methods

This section includes a description of the participants, recruitment, and the instruments used for the Needs Assessment Part III.

Participants

The participants in the Needs Assessment Part III were from School X.

Recruitment. The student investigator recruited participants from two physical education and two health classes during the fifth week of the 2015-2016 school year in October, 2015. While in the classroom, students were provided an overview of the survey and how it will be used. Students were told that participation was completely voluntary.

Instruments

The Social Capital Survey (SCS) in Appendix B is a refined measurement of the Social Capital Score that was used in the Needs Assessment Part II to operationalize social capital. The SCS takes into account all three definitions of social capital as defined by Coleman (1988): trust, information channels, and norms and effective sanctions. Similar to the Social Capital Score, three questionnaire items were averaged to generate a composite score.

Trust Score. Using a 4-point Likert scale (*1* = highly agree, *2* = agree, *3* = disagree, *4* = highly disagree), a Trust Score was calculated by averaging students' responses to the following questions.

- I have supportive peer relationships at School X
- I have friends at School X that I can trust
- I feel alone at School X (-)

Negative worded questions (-) were reverse coded (*4* = highly agree, *3* = agree, *2* = disagree, *1* = highly disagree). A higher Trust Score indicated a student who is less likely to have the social network to facilitate credit slips that Coleman (1988) described as an entity of social capital.

Information Channel Score. Using a 4-point Likert scale (*1* = highly agree, *2* = agree, *3* = disagree, *4* = highly disagree), an Information Channel Score (IC Score) was calculated by averaging students' responses to the following questions.

- If I was absent from school, I have peers that I can go to for missed work
- If I need help, I have a peer or a teacher at School X that I can go to
- I have someone at School X to go to if I need help with homework

A higher IC Score indicated a student who is less likely to have the social capital in the form of information that facilitates action (Coleman, 1988). The IC Score is not the value of credit slips, but the essential information that is usually useful for the recipient.

Norm Score. Using a 4-point Likert scale (*1* = highly agree, *2* = agree, *3* = disagree, *4* = highly disagree), a Norm Score was calculated by averaging students' responses to the following questions.

- School X is a place where I feel safe
- School X challenges me academically
- I can be successful at School X

A higher Norm Score indicates a student who is less likely to have the social capital in the form of norms and effective sanctions that Coleman (1988) defined.

Procedures

This section consists of data collection and data analysis.

Data Collection

The student investigator printed a class set of the SCS and dropped it off to the physical education and health teachers. The completed surveys were returned to the school counseling office after school.

Data Analysis

All data collected was stored and analyzed in SPSS. A frequency analysis and a bivariate correlation were the statistical analyses used in the needs assessment.

Results

Frequencies

Grade level participation was predominantly in the freshman class of 2019 (*n* = 116), followed by juniors in the class of 2017 (*n* = 2). There were slightly more girls (*n* = 61*)* than boys (*n* = 57) that participated. Participation in the needs assessment by ethnic group was as follows: Black (*n* = 78), White (*n* = 9), Hispanic/Latino (*n* = 16), Asian (*n* = 8), Multiracial (*n* = 4), Unreported (*n* = 3). Demographic information of participants in Needs Assessment Part III is summarized in Figure 2.2.

Grade Level	*n*
Freshman	116
Sophomore	0
Junior	2
Senior	0
Gender	*n*
Male	57
Female	61
Ethnicity	*n*
Black	78
White	9
Hispanic/Latino	16
Asian	8
Multiracial	4
Unreported	3

Figure 2. 2. Demographic information of participants in Needs Assessment Part III.

Eighty one percent (*n* = 94) of the freshmen indicated that they either highly agreed or agreed to the survey item "So far, I've had a good transition from middle

school to high school." Although the majority of the students in the sample indicated a good transition from middle school to high school, 68% (n = 79) indicated that high school has been stressful; 42% (n = 49) indicated that high school makes them anxious, and 59% (n = 68) indicated that they were overwhelmed with the amount of homework at school. Frequencies are summarized in Figure 2.3.

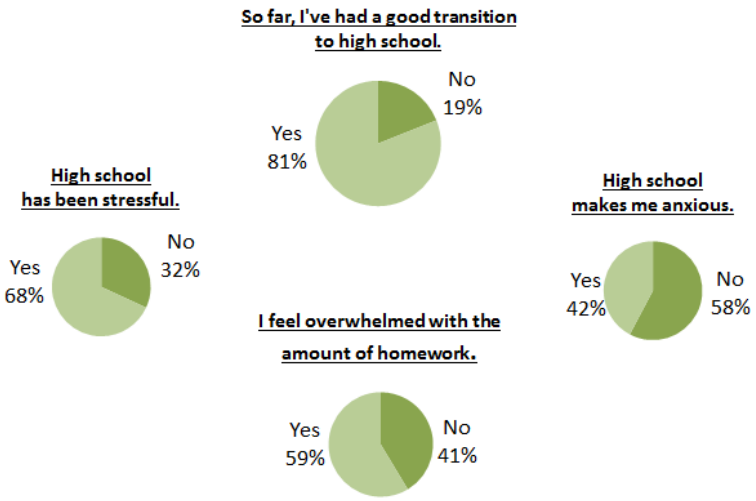

Figure 2. 3. Frequency pie chart of stress, anxiety, homework, and transition.

Trust

Students who indicated that high school has been stressful ($r(118) = -.778$, $p < .01$), makes them anxious ($r(117) = -.648$, $p < .01$), feel overwhelmed with the amount of homework ($r(118) = -.669$, $p < .01$), and feel lost at school ($r(117) = -.661$, $p < .01$) were more likely have a higher Trust Score. Additionally, students who indicated not having someone at School X to go to for homework help ($r(116) = .241$, $p < .01$) and who indicated feeling that they cannot be successful at School X ($r(118) = .287$, $p < .01$) were more likely to have a higher Trust Score. Males in the sample were more likely to receive a higher Trust Score ($r(118) = .216$, $p < .05$).

Results suggest that students' disposition of having credit slips, as operationalized by the Trust Score, have interactions with indicators that have been found as barriers to academic success such as stress (Isakson & Jarvis, 1999), anxiety (Benner & Graham, 2009), feeling lost at school (Uvaas & McKevitt, 2013), and not having someone at school to go to for help with homework (Akos & Galassi, 2004).

Information Channels

Students who indicated that high school has been stressful($r(118) = -.189$, $p < .05$) and makes them anxious ($r(117) = -.211$, $p < .05$) were more likely have a higher IC Score. Additionally, students who indicated that they do not have supportive peer relationships at School X ($r(118) = .332$, $p < .01$), friends at School X that they can trust ($r(117) = .358$, $p < .01$), feel alone at School X ($r(118) = -.446$, $p < .01$), and does not feel that School X is a safe place ($r(117) = .273$ $p < .01$) were more likely to have a higher IC Score.

Results suggest that students' disposition of information channels, as operationalized by the IC Score, have interactions with indicators that have been found as barriers to academic success such as stress (Isakson & Jarvis, 1999), anxiety (Benner & Graham, 2009), social isolation (Hall-Lande, Eisenberg, Christenson, & Neumark-Sztainer, 2007), and safety (Engstrom & Tinto, 2008).

Norms and Effective Sanctions

Students who indicated that high school has been stressful ($r(118) = -.199$, $p < .05$) were more likely have a higher Norm Score. Additionally, students who indicated a lack of friends at School X that they can trust ($r(118) = .257$, $p < .01$) and a lack of peers

or teachers at School X that they can go to if help is needed ($r(118) = .213$ $p < .01$) were more likely to have a higher Norm Score.

Results suggest that students' disposition of norms and effective sanctions as operationalized by the Norm Score, have interactions with indicators that have been found as barriers to academic success such as stress (Isakson & Jarvis, 1999) and a lack of trusting relationships (Hall-Lande, et al, 2007).

High School Transition

Using a 4-point Likert scale (*1* = highly agree, *2* = agree, *3* = disagree, *4* = highly disagree), students answered the following question:

- So far, I've had a good transition from middle school to high school.

Students who indicated that they did not have a good transition from middle school to high school were more likely to have a higher Trust Score ($r(117) = .185$ $p < .05$), IC Score ($r(117) = .268$ $p < .01$), and Norm Score ($r(117) = .223$ $p < .05$).

Results suggest that students who indicated that they did not have a good transition from middle school to high school were more likely to not have the social capital to navigate through the high school experience.

All significant interactions are summarized in Figure 2.4.

Limitations

Needs Assessment Part III was successful at surveying the population where high school transition was most relevant: freshmen ($n = 116$). The number of freshmen surveyed was about a third of the class. However, the timing of the survey could have been a threat to internal validity. The survey was disseminated during the fifth week of school, when freshman have already transitioned into high school. Freshmen already

familiarized themselves with high school and stress from navigating the building could be significantly less than the first day of school. Nevertheless, transition effects have been found to last up to the end of the sophomore year (Benner & Graham, 2009). It is difficult to find the appropriate or correct time to assess freshman students' transition. Future

Item	Trust Score	IC Score	Norm Score
School makes me anxious.	($r(117) = -.648, p < .01$)	($r(117) = -.211, p < .05$)	
School has been stressful.		($r(118) = -.189, p < .05$)	($r(118) = -.199, p < .05$)
I have supportive peer relationships at school.		($r(118) = .332, p < .01$)	
I have friends at school who I can trust.		($r(117) = .358, p < .01$)	($r(118) = .257, p < .01$)
I feel alone at school.		($r(118) = -.446, p < .01$)	
School is a safe place.		($r(117) = .273, p < .01$)	
I have a peer or a teacher at school who I can go to if I need help.			($r(118) = .213, p < .01$)
I have someone at school to go to for homework help.	($r(116) = .473, p < .01$)		
I have peers that I can go to for missed work if I was absent.	($r(118) = .325, p < .01$)		
I feel overwhelmed with the amount of homework.	($r(118) = -.669, p < .01$)		
I feel lost at school.	($r(117) = -.661, p < .01$)		
So far I've had a good transition from middle school to high school.	**($r(117) = .185, p < .05$)**	**($r(117) = .268, p < .01$)**	**($r(117) = .223, p < .01$)**

Figure 2. 4. Significant relationships between social capital and high school transition.

studies can perhaps survey students every two weeks to see when the high school transition effects are most prevalent.

Social capital was measured by the Trust Score, IC Score, and the Norm Score. Similar to the Social Capital Score used in Needs Assessment Part II, the composite score took into account multiple items rather than making assumptions based solely on one question. Future studies can benefit from calculating a Cronbach's alpha for inter-item reliability to determine if each questionnaire item acts as a unified construct to measure social capital. Lastly, it can be confusing to state that higher Trust, IC, and Norm Scores indicated an unfavorable effect. Future studies should reverse the scale (*1* = highly agree, *2* = agree, *3* = disagree, *4* = highly disagree) to (*1* = highly disagree, *2* = disagree, *3* = agree, *4* = highly agree) so that favorable outcomes indicate higher results.

Conclusion

The purpose of Chapter 2 was to collect information using a needs assessment. Analyses were conducted to explore the relationships between GPA, social capital, and high school transition. The hypothesized relationships between these constructs were depicted in Figure 1.1. Failure rates and GPA results from the Needs Assessment Part 1 suggest that there is a need for supports that facilitate positive academic outcomes for students. Needs Assessment Part II suggest that there is an association between social capital and GPA. In fact, Needs Assessment Part II suggests that social capital facilitated students to reap the benefits that come from supports at school when support at home is insufficient. Finally, Needs Assessment Part III suggests that there is a relationship between social capital and the middle school to high school transition. Students who reported having higher social capital were more likely to indicate a successful high school transition. Therefore, School X could potentially benefit from school supports that utilize social capital to ease the negative effects of the middle school to high school

transition. Chapter 3 proposes an intervention that may ease the negative effects of the middle school to high school transition.

Chapter 3

Intervention

Chapter 3 is an introduction to the proposed intervention. Mentoring is a viable program to support the transition from middle school to high school because it can be tailored to students' individual, cultural, racial, and diverse needs (Ross, 2016). Mentoring has a foundation in social constructivist theory. To better understand mentoring, social constructivism will be discussed.

Social Constructivist Theory

The social constructivist theory suggests that meaning is constructed through the environment and that learning is not self-contained, but is linked to the environment and the context in which learning is occurring (Brown, Collins, & Duguid, 1989). Similarly, Cobb and Bowers (1999) argue that knowledge is situated and is influenced by context, previously activated schemata, and social constructs. Situated learning is a product of the activity, context, and culture in which it is developed and used (Brown et al., 1989).

Tool Use

A key concept of situated learning is tool use. Brown et al. (1989) suggest that learning is similar to having a set of tools. Brown et al. (1989) described how tools, in this case knowledge, can only be fully understood through use. Through the use of tools, the user's view of the world and beliefs continuously change as the culture in which the tool enacted is impacting its use (Brown et al., 1989). As tools are being used, students gain a more complex understanding of material (Brown et al., 1989). In some cases, students quickly realize that some tools cannot be used. For example, algorithms, routines, and algebraic equations cannot easily be used in students' everyday lives. Cobb

and Bowers (1999) suggest that it is up to educators to provide a real and practical benefit to the knowledge being conveyed where students can transfer learning because they have used the tool appropriately and is relevant to how they view the world.

Brown et al. (1989) stated that tools can assist students in learning. Tools are framed through their culture, and the meaning and purpose of the tool being used are socially constructed. Tools in the form of behaviors where students pick up jargon, imitate behavior, and act in accordance to societal norms can sometimes present issues in the classroom (Brown et al., 1989). For example, when the culture at home is antithetical to the classroom culture, educators can easily perceive students with this culture as insubordinate. Too often, students are labeled as "problem children" without adults' attempt to understand their culture. Fortunately, educators can avoid this by gaining rapport with students, understanding their culture, and being open to conversation.

Cognitive Apprenticeship

Another key concept of situated learning is cognitive apprenticeship (Brown et al., 1989). Cognitive apprenticeship is where concepts of coaching, practice, reflection, and generality impact understanding and transfer (Brown et al., 1989). Cognitive apprenticeship takes existing knowledge and supports it by authentic activities that are relevant to students' cognitions and challenges them by asking for alternative ways that the solution can be manipulated (Brown et al., 1989). Through collaborative problem solving, role-playing, cooperative learning, and the confrontation of ineffective strategies and misconceptions, learners are able to utilize cognitive apprenticeship to gain understanding of complex materials and concepts (Brown et al., 1989).

Situated Learning and College and Career Readiness

Brown et al's. (1989) themes of collaborative problem solving, role-playing, cooperative learning, and the confrontation of ineffective strategies and misconceptions can help students to become knowledgeable consumers of education. At the school level, these coaches can take the form of a teacher, counselor, administrator, and classmate. Mentors can be a catalyst to using the set of tools to build on strengths and weaknesses. Mentors have an important role to ease the negative effects of the middle school to high school transition, thus pave the path for CCR.

Situated learning can be applied to CCR. For example, FGS who are the first in their families to become college eligible, often go through the college application process by themselves (Hoxby & Avery, 2013). FGS can benefit from having a mentor to coach them through the college choice and application process.

From examining the class of 2008's college aptitude test scores from the ACT and the CollegeBoard, Hoxby and Avery (2013) stated that FGS do not have a history of educated family members and accumulated social capital. Hoxby and Avery (2013) found that the vast majority of first-generation, low-income high achievers do not apply to selective colleges. Although selective institutions typically grant students who are low-income with generous financial aid, Hoxby and Avery (2013) revealed that low-income high achievers' application behaviors differ greatly from their high-income counterparts. Students who are low-income, but high achieving are less likely to be provided with information, assistance, and are not exposed to adults who attended highly selective colleges and universities (Hoxby & Avery, 2013). Hoxby and Avery (2013) highlights the importance of the school counseling profession and mentoring relationships as

important factors for students in order to dispel any misconceptions about the college application process. Similarly, mentoring may be able to address freshmen concerns during the middle school to high school transition.

Although Cobb and Bowers (1999) and Brown and colleagues' (1989) social constructivist perspective has its strengths, the theory does not fully account for the complexity of cultural factors such as poverty, parent's level of education, and students' psychology. Cobb and Bowers (1999) suggest that it is important to be cognizant of what is relevant to the student. Social constructivism, with this limitation in mind, is limited to the educator's own desire to gain rapport with students and to establish a working relationship that may or may not happen (Cobb & Bowers, 1999). Authentic activities, authentic relationships, and cognitive apprenticeships are predicated upon having both the student and the educator's buy-in in trusting the mentorship/apprenticeship process.

Conceptual Framework

MacIver and Epstein (1991) and the Center for Promise (2015) highlighted that too many young people are facing hurdles to graduation who lack the appropriate resources to succeed. Research conducted at the Center for Promise (2015) explored the roles that relationships with adults and peers play in young people's decisions to stay in, leave, and return to high school. The research surveyed nearly 3,000 young people and interviewed 120 of them. The Center for Promise (2015) utilized the term "interrupted enrollment" to describe students' educational trajectories. The term "dropout" is not how young people saw themselves, nor was it an accurate depiction of the events that resulted in their leaving of school. (Center for Promise, 2015) Center for Promise (2015) found that on average, young people who reported interruption in enrollment during high school

had twice as many adverse life experiences during adolescence when compared to young people who continuously stayed enrolled (Center for Promise, 2015). Adverse life experiences that have greater potential threats to graduation include becoming a parent, being suspended or expelled, being a part of a peer group where most left school before graduating, feeling academically unprepared for school, experiencing severe mental health issues such as depression or anxiety, and being homeless (Center for Promise, 2015). Exposure to multiple risk factors is associated with a higher risk of interrupted enrollment (Center for Promise, 20015). Interrupted enrollment increases by 19% for each additional adverse experience (Center for Promise, 2015). Youth who interrupted their enrollment in high school were more likely to report having fewer support networks to turn to for help (Center for Promise, 2015). In fact, the young people in the study were twice as likely to not reach out to anyone for help, and half as likely to reach out to a teacher (Center for Promise, 2015).

The presence of stable, trusting relationships such as those with mentors can lower the likelihood that young people experiencing adversity will leave school (Center for Promise, 2015). Trusting relationships, informational support, and having tangible resources or services can facilitate better outcomes of at risk students (Center for Promise, 2015; Coleman, 1988). Although social support can buffer the effects of adversity, students who face the greatest adversities (five or more adverse events) need more intensive support than family, school, and friends can provide (Center for Promise, 2015). However, research also suggests that one stable, trusted person can be an anchoring relationship that allows access to available community assets to engage in a

web of support – making a variety of supports visible, attainable, and relevant to engagement (Center for Promise, 2015).

Institutional Support

Supportive ties to institutional agents can be articulated through the concept of institutional support. Stanton-Salazar (2010) introduced the term institutional support which refers to the key resources and forms of social support that enables children and adolescents to access empowerment, achievement, class mobility, and self-determination. Stanton-Salazar (2010) suggests that school systems are the most important institutional sphere to facilitate institutional support. Institutional support is especially impactful for historically marginalized groups especially when forms of support entail advocacy, network development, guided cultural exposure, and bridging agents (Stanton-Salazar, 2010). Stanton-Salazar (2010) suggests that mentoring may encompass many forms of institutional support.

Mentoring

Mentoring programs have been used as a strategy to intervene in a variety of settings such as education, juvenile justice, and public health (DuBois, Portillo, Rhodes, Silverthorn, & Valentine, 2011). Mentoring programs were estimated to have served three million young people in more than 5,000 mentoring programs (MENTOR/National Mentoring Partnership, 2006). Mentoring programs have been embraced by policymakers and practitioners and have developed to serve specialized groups (e.g., youth in foster care, youth with incarcerated parents, students at risk for academic failure), facilitated target specific outcomes (e.g., academic achievement, delinquency prevention, childhood obesity), and have been applied to specific settings (e.g., schools, after-school program,

work) through alternative formats (e.g., electronics, group, peer mentoring) (DuBois et al., 2011). Despite the growth and the diverse application of mentoring, questions remain about the effectiveness of mentoring and the conditions necessary to optimize benefits for young people who participate (DuBois et al., 2011).

In program-evaluation research, the effect size commonly used is the standardized mean difference, or Cohen's d (DuBois et al., 2011). Cohen's d can be computed by taking the difference between the average scores of the treatment and control groups on an outcome measure and then dividing this difference by the measure's standard deviation (DuBois et al., 2011). An effect size of a .20 is considered to have a small effect, .50 a medium effect, and a .80 a large effect (Lipsey & Wilson, 2001).

Upon examination of the Big Brothers Big Sisters of America (BBBSA), which received a rating of effective by the Registry of Evidence-Based Programs and Practices, findings favored youth in the mentored program only by a small effect size of .06 (Herrera, Grossman, Kauh, Feldman, & McMaken, 2007). However, effect sizes on emotional/psychological, problem/high-risk behavior, social competence, academic, and career/employment domains increased systematically when best practices are taken into account (DuBois et al., 2011). Mentoring programs who recruit mentors with backgrounds in helping professions, clearly communicate program expectations, host activities for youth and their mentors, have supporting and involving parents, and systematically monitor and evaluate the implementation of the program have a .22 effect size (DuBois et al., 2011). Programs that did not use these best practices yielded a .09 effect size (DuBois et al., 2011).

From a meta-analysis of 73 mentoring programs directed towards the development of social-emotional, cognitive, and identity of youth, it was found that caring and meaningful relationships with older peers (non-parental adults) were effective at improving outcomes across behavioral, social, emotional, and academic domains, while non-mentored youth exhibited declines (DuBois et al., 2011). The effect size in the meta-analysis was a .21 with a 95% confidence interval.

These results provide evidence to suggest that mentoring has the capacity to serve both promotion and prevention aims for positive youth development (DuBois et al., 2011). Mentoring relationships point to a more positive orientation for higher educational aspirations (Herrera et al., 2007).

The Developmental Process in Mentoring

There are three areas of the developmental processes in mentoring: social-emotional, cognitive, and identity (DuBois et al., 2011).

Social-Emotional. Mentoring may facilitate social-emotional development of youth (DuBois et al., 2011). For example, mentors can model positive relationships with adults (DuBois et al., 2011). Mentoring can challenge negative relationships that youth experienced from parents or other caregivers and provide a more positive illustration of how to interact with adults (DuBois et al., 2011). Furthermore, modeling effective communication may help youth better understand, express, and regulate their emotions (McDowell, Kim, O'Neil, & Parke, 2002). As such, mentors open opportunities for youth to cope and help them approach negative experiences as opportunities for growth and learning (DuBois et al., 2011). Social-emotional growth has been found to produce positive outcomes for children (DuBois et al., 2011).

Cognitive. Mentors are vehicles through which youth can acquire and refine new thinking skills, become more receptive to adult values, advice, and perspectives (DuBois et al., 2011). The role of social support in fostering cognitive development has been associated with more positive academic adjustment for youth (DuBois et al., 2011). For example, feelings of closeness with teachers have been associated with more positive academic outcomes for youth (DuBois et al., 2011).

Identity. Mentors can help shape children's current and future identities (DuBois et al., 2011). Markus and Nurius (1986), refers to this notion as what they might become, what they would like to become, and what they fear becoming. When youth have the opportunity to observe and compare the adults they know, they are prompted to reflect on their current decisions and behavior (DuBois et al., 2011). More importantly, relationships with mentors may open doors to activities, resources, and educational or occupational opportunities on which youth can draw influence to construct their own identity (Darling, Hamilton, Toyokawa, & Matsuda, 2002).

Dubois and colleagues (2011) summarized the conceptual model and the quality of mentoring relationships experienced by youth, and the pathways linking them to developmental and academic outcomes (Figure 3.1). It is important to highlight that according to this model, positive social-emotional experiences with mentors enable youth to interact more effectively with parents and peers, thus mediating the effects of social-emotional development on positive outcomes such as grades and emotional well-being (DuBois et al., 2011).

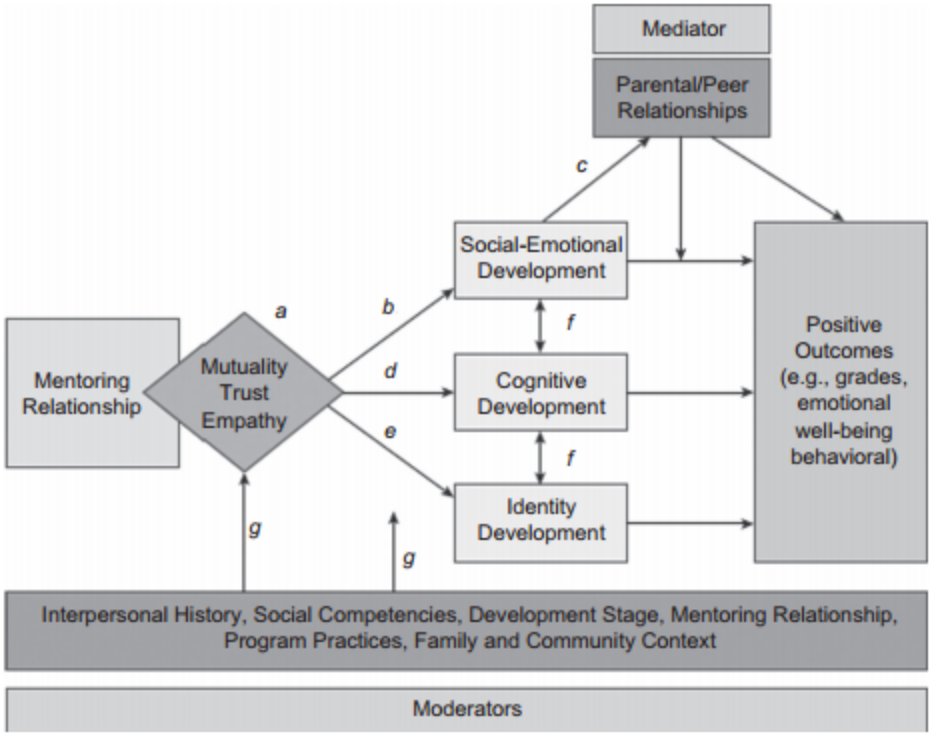

Fig. 1. Model of youth mentoring. A strong and meaningful personal connection is forged between the young person and mentor (component *a*), for instance in the context of working together on goal-oriented tasks. A positive interpersonal foundation is then posited to catalyze developmental processes in three areas—social-emotional (path *b*), cognitive (path *d*), and identity related (path *e*)—and these three areas are assumed to work in concert over time (*f* arrows). Positive social-emotional experiences with mentors can generalize, enabling youth to interact more effectively with parents and peers (path *c*), and these relationships can in turn mediate the effect of gains in social-emotional development on positive outcomes. The quality of the mentoring relationships and the pathways linking it ultimately to positive youth outcomes can be conditioned by factors pertaining to a youth's interpersonal history, social competence, and developmental stage; duration of the mentoring relationship; program practices involved in establishing and supporting the mentoring relationship and its duration; and the youth's family and surrounding community context (*g* arrows). Figure reprinted with slight modification from *Stand by Me: The Risks and Rewards of Mentoring Today's Youth*, by Jean E. Rhodes, 2002, p. 36, Cambridge, MA: Harvard University Press. Copyright 2002, the President and Fellows of Harvard College. Reprinted with permission of the publisher.

Figure 3. 1. A conceptual model for youth mentoring by Dubois et al. (2011).

The Value of Mentoring

Bruce and Bridgeland (2014) conducted the first nationally representative survey of young people's perspectives on mentoring. A total of 1,109 young adults between the ages of 18-21 participated in the survey. Telephone, online, and in-person interviews were also conducted in ten diverse locations across four regions of the United States. Bruce and Bridgeland (2014) were confident that the survey sample represented a true

national sample of young adults ages 18-21. The term "at-risk" was defined by delinquency, substance abuse, early childbearing, and school failure.

Leadership. For at-risk youth, having a mentor was correlated with engagement in more positive activities such as sports or extracurricular activities, being more likely to hold a leadership position in a club, school council or another group, and being more likely to volunteer in the community (Bruce & Bridgeland, 2014). These mentoring relationships were more likely to produce better outcomes the longer the mentoring relationships lasts (Bruce & Bridgeland, 2014). Young people with longer mentoring relationships were more likely to enroll in and graduate from college (Bruce & Bridgeland, 2014). Ninety-five percent of young adults who had mentors speak highly of these relationships and found the experience to be helpful (Bruce & Bridgeland, 2014). The value of mentoring was confirmed when nearly nine in ten respondents who were mentored showed interest in becoming mentors themselves (Bruce & Bridgeland, 2014).

Academic. Structured mentoring tended to provide academic support. The most cited benefit of mentoring was about advice on where to get help with school issues and/or school work (Bruce & Bridgeland, 2014). Mentored youth also cited receiving help to address life problems, assistance with job placement, choosing a career, and getting into college (Bruce & Bridgeland, 2014).

Developmental. It was revealed that mentees in informal mentoring relationships received advice and encouragement on making sound decisions, following the right path, and to stay motivated (Bruce & Bridgeland, 2014).

The Mentoring Gap

Despite of the benefits that mentoring can provide, one in three at-risk youth do not have a mentor, and approximately 16 million youth will reach age 19 without an adult mentor (Bruce & Bridgeland, 2014). Even if the current number of adult volunteer mentors were to double, data appears to suggest that programs would still be reaching less than ten percent of the young people in need (Bruce & Bridgeland, 2014; Rhodes, 2015). There is an opportunity to utilize an underused resource. Training young peers to mentor each other can help address the mentoring gap (Ross, 2016).

School-Based Mentoring

School-based mentoring is different from community-based mentoring models. School-based mentoring programs operate on the school campus for the duration of the school year (Garringer, 2007). Participants are usually referred by teachers, counselors, and other school staff (Garringer, 2007). School-based mentoring is distinct from tutoring (Garringer, 2007). School-based mentoring encourages trust, mutually satisfying relationships, and is inherently connected to academics and the school (Garringer, 2007).

School-based mentoring engages volunteers and youth who might not be involved with mentoring otherwise (Garringer, 2007). School-based mentoring usually requires a shorter and less intensive time commitment than traditional community-based programs because of the limited amount of time set aside in the school day schedule for mentors and mentees to meet (Garringer, 2007). This model attracts categories of volunteers such as corporate employees, college students, military personnel, and older youth who are already in the school (Garringer, 2007). Because of the greater ability to monitor and guide matches, school-based mentoring programs provide an opportunity for community-

based programs to easily expand their volunteer pool (Garringer, 2007). School-based programs provide an opportunity to reach youth who might be underserved by the traditional community model from extra attention and support at school (Garringer, 2007). Additionally, school-based mentoring programs are cost effective due to the access of school facilities and resources (Garringer, 2007).

School-based mentoring produces many positive outcomes for youth such as improved academic performance and quality of class work, increase in homework and class work submission, a reduction in serious school infractions and class skipping, and an increase in students' perception of scholastic competence (Garringer, 2007).

Cross-Age, School-Based Peer Mentoring

In a randomized study of a developmental mentoring program where mentoring was conducted in a group format, twice weekly after school for two hours in a six month period, 73 White, rural youth (fourth and fifth graders) were assigned to either a treatment or a control group. Thirty six middle and high school students mentored about 33 elementary students in the treatment group. The mentors received training to promote connectedness to school and connectedness to their parents through a connectedness curriculum (Karcher, 2005). Regression analysis revealed that changes in self-esteem, social skills, and behavioral competence were highly correlated to mentors' attendance, suggesting that the presence of having a peer mentor accounted for more change than did exposure to the connectedness curriculum (Karcher, 2005). The relationship between mentors' inconsistent attendance and mentees' decline in self-esteem and behavioral competence suggests that absent mentors may actually be harmful (Karcher, 2005). Although changes in mentees' reported school and parent connectedness levels were

found to be insignificant, findings advocate that school-based, peer mentoring facilitated changes in school-related attitudes and behaviors even when it does not include tutoring or academic activities (Karcher, 2005). The research highlighted that the quality of the mentoring relationship and commitment appeared to be more important than the program curricula (Karcher, 2005). The study provided evidence that curricula-based, group format, cross-age mentoring can have its benefits but also posits challenges in maintaining the quality of the mentoring relationship as it relates to likeability, attractiveness, behavior self-management skills, and attendance of the mentor (Karcher, 2005).

The Center for Supportive Schools

Founded in 1979, CSS focuses on social and emotional learning to impact students' life course trajectories through cultural transformation within schools. CSS has a vision that one day, all children will thrive in schools that graduate them prepared for the rigors of college and lives filled with meaningful work, active citizenship, and personal fulfillment (Center for Supportive Schools). CSS' mission is to develop, disseminate, and promote peer leadership, advisory, and other evidence-based K-12 solutions that enable and inspire schools to more fully engage students in learning, better connect students to their schools, motivate and equip students to make decisions responsibly, and accelerate academic achievement (Center for Supportive Schools). CSS headquarters is located in three main cities: Princeton, New Jersey, Brooklyn, New York, and Wake Forest, North Carolina, but touches tens of thousands of students, educators, and parents annually. CSS has served hundreds of schools in 13 states as well as in Asia and South America (Center for Supportive Schools). CSS is in urban, suburban, and rural

communities ranging from high-poverty to more affluent neighborhoods. CSS has operated in Atlanta, GA; Camden, NJ; Greene County, NC; Los Angeles, CA; Newark, NJ; New York, NY; Princeton, NJ, Philadelphia, PA; Thomasville, NC, Trenton, NJ; Baltimore, MD; and in many other communities.

The Center for Supportive Schools trains school faculty to teach leadership courses to a select group of high school upper-classmen, who in turn educate and support younger students (Peer Group Connection [PGC], 2009). PGC is an evidence-based program that supports and eases students' successful transition from middle school to high school by tapping into the leadership potential of junior and senior peer leaders. Peer leaders meet with groups of about fifteen freshmen in outreach sessions designed to strengthen relationships amongst students across grades. Simultaneously, peer leaders are enrolled in a daily, for-credit, year-long leadership course taught by school faculty. PGC has been implemented with a 75% sustainability rate in more than 175 high schools (Peer Group Connection, 2009).

Peer Group Connection

In a study of 269 ninth grade students (133 girls; 136 boys) from a low-income, Mid-Atlantic urban high school (ranked by the Brookings Institute as one of the top one hundred most economically depressed localities in the United States) where the majority of the participants were Hispanic/Latino (92%), students were randomly assigned to an experimental (n = 94) and a control (n = 175) group. Students in the experimental group participated in PGC where program advisors/instructors team-taught a daily leadership course in which 14 students in their junior and senior years were trained to become peer leaders for freshmen. Freshmen in the experimental group met with upperclassmen once

a week for 18 weeks to discuss high school transition, interpersonal relationships, decision making, goal setting, the importance of attending school, academic achievement, planning for the future, safety, communicating with others, and making friends as a component of their physical education course. Findings suggest that PGC significantly improved student graduation rates (Johnson, Simon, & Mun, 2014). Students in PGC graduated at the rate of 76.6% (n = 72) versus 67.4% (n = 118) in the control group. The program effect was dramatic for males. Eighty one percent (n = 38) of the males in PGC graduated from high school whereas only 63% (n = 56) of the males in the control group graduated within the same time frame (Johnson et al., 2014). PGC addressed the common reasons that students cite for dropping out of school and results provided evidence to suggest that the program was a successful intervention, especially for minority males (Johnson, et al., 2014).

PGC is grounded in social and emotional learning (SEL).

According to the Collaborative for Academic, Social, and Emotional Learning (2003):

> SEL involves the processes through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions. (p. 4)

PGC incorporates all of the best practice recommendations for SEL, high school transition, and peer mentoring programs because it is multi-year in duration, interactive, integrated into the life of the school, guides students throughout the period of change, facilitates caring relationships, creates a culture of support and sense of community, and provides students with mentoring, life skills, and opportunities to develop interpersonal

skills and relationships (Johnson, et al., 2014). PGC utilizes effective peer mentoring models by utilizing cross-age leaders, adult support and supervision, and developmentally appropriate and engaging activities (Johnson, et al., 2014).

Summary

Social capital in mentoring presents itself in many forms. Primarily, the Center for Promise (2015) found that Coleman's (1988) definition of social capital can be the catalyst for better outcomes of at risk youth. Trusting relationships, information support, and having tangible resources can buffer the effects of adversity (Center for Promise, 2015). Social capital can be life changing which highlights how the power of one stable, trusted person can be the catalyst to access a myriad of supports (Center for Promise, 2015).

The proposed intervention to ease the high school transition was delivered through a peer mentoring program called PGC. Similar to the study conducted by Johnson and colleagues (2014), PGC is hypothesized to facilitate positive academic, social, and CCR outcomes for students. The implementation of PGC is different in every setting because mentoring can be tailored to the specific needs of the institution. Nevertheless, PGC is an appropriate intervention to ease the high school transition because it provides freshmen the opportunity to have that one stable, trusted person to engage them in school. Training upperclassmen as peer mentors is also an opportunity to take advantage of an underutilized resource. In the midst of high student to counselor ratios and the need for more school support at School X, mentoring will provide freshmen the opportunity to connect with a role model to guide them through the demanding nature of high school transition. PGC is an effective model because it utilizes

the cross-age leaders, supervision from adults, and engaging activities to facilitate caring relationships in the school community (Johnson et al., 2014). Finally, PGC will connect freshmen with cognitive apprenticeships/mentors to guide them through the stresses of transition and high school life. PGC fits with Stanton-Salazar's (2010) concept of institutional support which was found to be an especially powerful force for historically marginalized groups.

Chapter 4

Methods and Procedures

The needs assessment and intervention literature indicated the necessity for supports during the middle school to high school transition and how mentoring may be the catalyst to facilitate positive academic, social, and CCR outcomes for youth. Chapter 4 will describe the intervention procedure and program evaluation methodology of PGC at School X.

Methods

The methods section encapsulates a description of the participants and the instruments used to answer the research questions.

Participants

During freshman orientation, the incoming class of 2020 participated in a course selection workshop. During the workshop, families were provided a quick overview of the various programs that were available at School X. PGC was introduced to families as a peer mentoring program to ease the middle school to high school transition. It was discussed that PGC students are dismissed from their physical education or health class once a week to meet with their peer mentors for a whole school year. Freshmen, along with their parents or guardians, indicated their interest to participate in PGC by checking a box on their course request sheet. There was more interest than spaces available. The master scheduler opened three PGC sections (about 32 students per section), which in this study is considered as the pool for the experimental group.

Recruitment. The student investigator visited the three PGC sections to recruit students to participate in the study. The student investigator familiarized students with the

various sections of the Parental Informed Consent Form (Appendix C) which includes the purpose of the research study, procedures, risks and discomfort, benefits, voluntary participation and right to withdraw, confidentiality, and questions. As an incentive, students received a bag of chips upon the return of a signed Parental Informed Consent Form and successful submission of the instruments which occurred the following day on a second visit.

To recruit students in the control group (non-PGC students), the student investigator visited various freshmen level classes (3 health, 1 physical education, and 1 AP World History). The student investigator walked the freshmen through the various sections of Appendix C, similar to the experience the PGC students received. As an incentive, students received a snack upon the return of a signed Parental Informed Consent Form and successful submission of the instruments which occurred the following day on a subsequent visit.

Instruments

The instruments used in the study were (a) final grades, (b) social capital survey – revised, (c) social anxiety scale for adolescents, and the (d) end of year survey for outreach participants.

Final Grades. GPA and course failure rates were collected through Baltimore City Public Schools' student management system in Infinite Campus at the end of the 2016-2017 school year. Final grades were collected for all students who participated in the study.

Social Anxiety Scale for Adolescents. The Social Anxiety Scale for Adolescents (SAS-A) created by La Greca and Lopez (1998) measured: (a) fear of negative evaluation

to assess students' fears, concerns, or worries regarding negative evaluations from peers, and (b) social avoidance and distress with new social situations or unfamiliar peers, general social distress, discomfort, and inhibition.

La Greca and Lopez (1998) examined the utility of modifying the Social Anxiety Scale for Children – Revised (SASC-R) for use with adolescents (101 boys, 148 girls; grades 10 through 12). Participants were from a large Southeastern metropolitan area (51.6% White, 31.6% Hispanic, 15.2% Black, and 1.6% Asian), whose average socioeconomic backgrounds were from the middle-class. The authors examined social anxiety and adolescents' peer relationships, friendships, and social functioning by completing the Social Anxiety Scale for Adolescents (SAS-A). Exploratory and confirmatory examination of the factor structure and the psychometric properties of the SAS-A revealed three factors that have moderate interrelationships amongst each other (La Greca & Lopez, 1998). The first subscale (a) Fear of Negative Evaluation (FNE) included eight items to reflect adolescents' fears, concerns, or worries regarding negative evaluations from peers. The FNE subscale yielded a strong internal consistency ($\alpha = .91$). There were two subscales for Social Avoidance and Distress (SAD): (b) SAD-General included 4 items that reflect generalized or pervasive social distress, discomfort, and inhibition ($\alpha = .76$), and (c) SAD-New included six items that reflect social avoidance and distress with new social situations or unfamiliar peers ($\alpha = .83$). Each subscale was significantly correlated with each other ($p < .001$): FNE and SAD-General ($r = .52$), SAD-General and SAD-New ($r = .55$), FNE and SAD-New ($r = .67$).

Fear of Negative Evaluation. Using a 5-point Likert scale (*1* = never, *2* = almost never, *3* = sometimes/occasionally, *4* = almost all the time, *5* = all the time), a Fear of

Negative Evaluation (FNE) level was calculated by summing students' responses to the following questions:

- I worry about what others say about me.
- I worry that others don't like me.
- I'm afraid that others will not like me.
- I worry about what others think of me.
- I worry about being teased.
- I feel that peers talk about me behind my back.
- If I get into an argument, I worry that the other person will not like me.

Scores were obtained by summing the ratings which ranged from 8 to 40.

Social Avoidance and Distress - General. Using a 5-point Likert scale (*1* = never, *2* = almost never, *3* = sometimes/occasionally, *4* = almost all the time, *5* = all the time), a Social Avoidance and Distress (SAD-General) level was calculated by summing students' responses to the following questions:

- It's hard for me to ask others to do things with me.
- I'm afraid to invite others to do things with me because they might say no.
- I am quiet when I'm with a group of people.
- I feel shy even with peers I know very well.

Scores were obtained by summing the ratings which ranged from 4 to 20.

Social Avoidance and Distress - New. Using a 5-point Likert scale (*1* = never, *2* = almost never, *3* = sometimes/occasionally, *4* = almost all the time, *5* = all the time), a Social Avoidance and Distress (SAD-New) level was calculated by summing students' responses to the following questions:

- I get nervous when I meet new people.
- I feel shy around people I don't know.
- I get nervous when I talk to peers I don't know very well.
- I feel nervous when I'm around certain people.
- I only talk to people I know really well.
- I worry about doing something new in front of others.

Scores were obtained by summing the ratings which ranged from 6 to 30.

Table 4. 1

Social Anxiety Scale for Adolescents per Subscale

Fear of Negative Evaluation (FNE)	Social Avoidance & Distress (SAD-General)	Social Avoidance & Distress (SAD-New)
I worry about being teased. (3)	I am quite when I'm with a group of people. (15)	I worry about doing something new in front of others. (1)
I feel that peers talk about me behind my back. (6)	I'm afraid to invite others to do things with me because they might say no. (19)	I feel shy around people I don't know. (4)
I worry about what others think of me. (8)	I feel shy even with peers I know very well. (21)	I only talk to people I know really well. (5)
I'm afraid that others will not like me. (9)	It's hard for me to ask others to do things with me. (22)	I get nervous when I talk to peers I don't know very well. (10)
I worry about what others say about me. (12)		I get nervous when I meet new people. (13)
I worry that others don't like me. (14)		I feel nervous when I'm around certain people. (20)
I feel that others make fun of me. (17)		
If I get into an argument, I worry that the other person will not like me. (18)		

Note. Item numbers are in parentheses. (La Greca & Lopez, 1998).

***Overall Social Anxiety*.** An overall social anxiety score was calculated by summing the FNE, SAD-General, and SAD-New subscales. Scores can range from 18 to 90. A copy of the SAS-A is attached in Appendix E. Table 4.1 is a summary of each questionnaire item per subscale.

Reliability of the Social Anxiety Scale for Adolescents. Participants' responses were tested for inter-item reliability ($N = 99$). FNE subscale consisted of 8 items ($\alpha = .911$), the SAD-General subscale consisted of 4 items ($\alpha = .761$), and the SAD-New subscale consisted of 6 items ($\alpha = .890$). The SAS-A was found to be highly reliable, illustrated in Table 4.2 (18 items; $\alpha = .946$).

Table 4. 2

Reliability of the Social Anxiety Scale for Adolescents per Subscale

SAS-A	Cronbach's Alpha	N of Items
FNE	.911	8
SAD-General	.761	4
SAD-New	.890	6
Overall Social Anxiety	.946	18

Validity of the Social Anxiety Scale for Adolescents. The SAS-A was derived from the SASC-R which was validated primarily for children by many authors (La Greca & Lopez, 1988). According to La Greca and Lopez (1998), "Construct validity of the SAS-A was supported by pattern of relationships between SASC-R subscales and children's self-appraisals, as well as peer-rated sociometric status" (p. 86). Convergent validity was also supported. La Greca and Lopez (1998) found that high socially anxious girls were more likely to report less support from classmates ($r = .53$) and lower perceptions of their social acceptance ($r = -.52$) and romantic appeal ($r = -.52$) than low

socially anxious boys (r = -.25, -.39, and -.30 respectively). Additionally, close friendships and peer acceptance were significant predictors of social anxiety for girls (predicted 29% - 43% of the variance in SAS-A scores) and peer acceptance was consistently associated with social anxiety for boy (predicted 10% - 17% of the variance in SAS-A scores) (La Greca and Lopez, 1998).

Social Capital Survey - Revised. The Social Capital Survey – Revised (SCS-R) measured students' level of social capital in the areas of (a) trust, (b) information channels, (c) norms and effective sanctions, and (d) demographic information. The SCS-R takes into account Coleman's (1988) definitions of social capital. From each subscale, a student can receive a minimum score of 3 and a maximum of 15. A copy of the survey is attached in Appendix D.

Trust Score. Using a 5-point Likert scale (*1* = highly disagree, *2* = disagree, *3* = neutral, *4* = agree, *5* = highly agree), a Trust Score was calculated by summing students' responses to the following questions:

- I have peers at school that support me.
- I have friends at school that I can trust.
- I feel alone at school (-).

Negative worded questions (-) were reversed coded (*1* = highly agree, *2* = agree, *3* = neutral, *4* = disagree, *5* = highly disagree). A higher Trust Score indicated a student who is more likely to have the social network to facilitate credit slips that Coleman (1988) described as an entity of social capital.

Information Channels Score. Using a 5-point Likert scale (*1* = highly disagree, *2* = disagree, *3* = neutral, *4* = agree, *5* = highly agree), an Information Channels Score (IC Score) was calculated by summing students' responses to the following questions:

- If I was absent from school, I have a peer that I can go to for missed work.
- If I need help, I have a teacher at school that I can go to.
- If I have issues at home, I have someone at school that I can reach out to for advice/help.

A higher IC Score indicated a student who is more likely to have the social capital in the form of information that facilitates action (Coleman, 1988).

Norms and Effective Sanctions Score. Using a 5-point Likert scale (*1* = highly disagree, *2* = disagree, *3* = neutral, *4* = agree, *5* = highly agree), a Norms and Effective Sanctions Score (Norm Score) was calculated by summing students' responses to the following questions:

- School is a place where I feel safe.
- I have learned lessons in school about persevering through adversity.
- I can be successful in school.

A higher Norm Score indicates a student who is more likely to have the social capital in the form of norms and effective sanctions that Coleman (1988) defined.

Overall Social Capital Score. To calculate an overall depiction of students' social capital, an Overall Social Capital Score was calculated by taking the sum of the Trust Score, IC Score, and Norm Score. Scores may range from 9 – 45.

Table 4.3 is a summary of each subscale, numbered in the order it was provided in the SCS-R.

Table 4. 3

Social Capital Survey – Revised Items per Subscale

Trust	Information Channels	Norms
1. I have peers at school that supports me.	4. If I was absent from school, I have a peer that I can go to for missed work.	7. School is a place where I feel safe.
2. I have friends at school that I can trust.	5. If I need help, I have a teacher at school that I can go to.	8. I have learned lessons in school about persevering through adversity.
3. I feel alone at school.	6. If I have issues at home, I have someone at school that I can reach out to for advice.	9. I can be successful at school.

Reliability of the Social Capital Survey – Revised. Participants' responses were tested for reliability using internal consistency to ensure that each item in the SCS-R acted as a unified construct ($N = 99$). A Cronbach's alpha was calculated. Alpha values demonstrated a moderate internal consistency ($\alpha = .813$), Trust Score ($\alpha = .717$), IC Score ($\alpha = .616$), and Norm Score ($\alpha = .707$). Figure 4.1 is a summary of the reliability of the SCS-R and a description of the alpha values if an item in each subscale were to be deleted. No items were deleted due to the moderate internal consistency of the questionnaire items.

Trust Score Reliability $\alpha = .717$		IC Score Reliability $\alpha = .616$		Norm Score Reliability $\alpha = .707$	
	α if item is deleted		α if item is deleted		α if item is deleted
Q1	$\alpha = .593$	Q1	$\alpha = .632$	Q1	$\alpha = .643$
Q2	$\alpha = .497$	Q2	$\alpha = .510$	Q2	$\alpha = .550$
Q3	$\alpha = .782$	Q3	$\alpha = .369$	Q3	$\alpha = .642$

Figure 4. 1. Reliability of the Social Capital Survey - Revised.

The reliability of the SCS-R was further investigated by conducting a bivariate correlation for each of the items in the questionnaire (Table 4.4). Question items were labeled by a TR (Trust Score), IC (IC Score), and N (Norm Score). Each item per subscale was significantly correlated to each other at the 0.05 or at the 0.01 level.

Table 4. 4

Inter-item Correlation Matrix of the Social Capital Survey - Revised

	TR1	TR2	TR3	SC1	SC2	SC3	N1	N2	N3
TR1	1.000	.653**	.341**	.366**	.272**	.383**	.393**	.371**	.364**
TR2	.653**	1.000	.423**	.274**	.284**	.432**	.462**	.376**	.350**
TR3	.341**	.423**	1.000	.119	.167	.311**	.346**	.300**	.403**
SC1	.366**	.274**	.119	1.000	.229*	.344**	.297**	.211*	.139
SC2	.272**	.284**	.167	.229*	1.000	.478**	.203*	.237*	.311*
SC3	.383**	.432**	.311**	.344**	.478**	1.000	.327	.398**	.249*
N1	.393**	.462**	.346**	.297**	.203*	.327**	1.000	.473**	.398**
N2	.371**	.376**	.300**	.211*	.237*	.398**	.473**	1.000	.501**
N3	.364**	.350**	.403**	.139	.311**	.249*	.398**	.501**	1.000

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

Validity of the Social Capital Survey – Revised. Social anxiety in particular has been recognized as an important factor that inhibits or impedes adolescents' interpersonal functioning (La Greca & Lopez, 1998). Social anxiety is associated with behavior inhibition and social withdrawal, which may impede the formation for adolescents to form successful relationships with peers (La Greca & Lopez, 1998).

Divergent validity of the SCS-R was tested by correlating the Overall Social Capital Score with the Overall Social Anxiety level. There was a significant negative

correlation between students' Overall Social Capital Score and Overall Social Anxiety level ($r(99) = -.317$, $p < .01$).

La Greca and Lopez (1998) observed connections between adolescents' social anxiety and interpersonal functioning. La Greca and Lopez (1998) found that adolescents who reported higher levels of social anxiety felt less accepted and supported by their classmates and felt less attractive.

Convergent validity of the SCS-R was tested by correlating the Overall Social Capital Score with the question: "I have peers at school that support me." There was a significant positive correlation between students' Overall Social Capital Score and having peer support at school ($r(99) = -.703$, $p < .01$).

End of Year Survey for Outreach Participants (Experimental Group). The end of year survey for outreach participants was created by CSS, intended to only be disseminated to students who participated in PGC. From not at all to a great amount (*1* = not at all, *2* = very little, *3* = somewhat, *4* = quite a bit, *5* = a great amount), PGC students indicated their responses from the ways in which PGC has helped them adjust to high school. Section 2 instructed freshmen to write a few sentences to answer the following questions:

- How much did you look forward to meeting with your group?
- How much did you feel your peer leader(s) cared about you?
- Please describe one way that PGC has been important to you this year
- What would make PGC better?

A copy of the survey is attached in Appendix F.

College and Career Readiness Standards **(Experimental Group).** The 25-item End of Year Survey for Outreach Participants was used to measure CCR standards. In accordance to Mishkind's (2014) definition, six CCR categories were pulled from the questionnaire: (a) interpersonal skills, (b) initiative, (c) goal setting, (d) collaboration, (e) critical thinking, (f) social-emotional. Appendix G outlines the questions that were used to operationalize each construct of CCR. Each response per CCR category was summed to produce a categorical score. The interpersonal skills category ranged from 8 to 40, initiative 5 – 25, goal setting 2 – 4, collaboration 3 – 15, critical thinking 4- 20, social-emotional 3 – 15.

Reliability of College and Career Readiness Standards. Each questionnaire item of the End of the Year Survey for Outreach Participants was tested for reliability per CCR category. Alpha values demonstrated a moderate internal consistency with an overall $\alpha = .927$, interpersonal skills $\alpha = .921$, initiative $\alpha = .911$, goal setting $\alpha = .873$, collaboration $\alpha = .774$, critical thinking $\alpha = .929$, social-emotional $\alpha = .822$. Table 4.5 summarizes the alpha level for each CCR category.

Table 4. 5

Reliability of College and Career Readiness Standards per Category

	Interpersonal Skills	Initiative	Goal Setting	Collaboration	Critical Thinking	Social - Emotional
α	.921	.911	.873	.774	.929	.822

Validity of College and Career Readiness Standards. Participants' responses from the mentored group ($n = 54$) were tested for convergent validity. Correlational analysis posited high correlational values between categories suggesting that the measurement has favorable convergent validity. Divergent validity was tested by

correlating each CCR category with Overall Social Anxiety. Correlational values suggest moderate convergent and divergent validity of the College and Career Readiness Standards (Table 4.6).

Table 4.6

Inter-item Correlation Matrix of College and Career Readiness Standards

	1	2	3	4	5	6	7
1.Interpersonal Skills	1	.864**	.824**	.832**	.802**	.837**	-.229
2.Initiative	.864**	1	.850**	.799**	.842**	.878**	-.286*
3.Goal Setting	.824**	.850**	1	.799**	.865**	.845**	-.466**
4.Collaboration	.832**	.799**	.799**	1	.723**	.817**	-.267
5.Critical Thinking	.802**	.842**	.865**	.723**	1	.779**	-.245
6.Social-emotional	.837**	.878**	.845**	.817**	.779**	1	-.303*
7.Social Anxiety	-.229	-.286*	-.466**	-.267	-.245	-.303*	1

*. Correlation is significant at the 0.05 level (2-tailed)

**. Correlation is significant at the 0.01 level (2-tailed)

Procedures

The procedures section includes a description of the intervention and data analysis.

Peer Group Connection

Peer Group Connection is an evidenced-based program that supports and eases students' successful transition from middle school to high school. The program taps into the power of high school juniors and seniors to create a nurturing environment for incoming freshmen. Once per week, pairs of junior and senior peer leaders meet with group of 10-15 freshmen in outreach sessions designed to strengthen relationships across grades.

The weekly outreach sessions that are facilitated by upper classmen include caring and supportive environments to get freshmen to examine the impact of decision-making on high school graduation and life after high school (PGC, 2009). Through activities, freshmen develop concrete skills and motivation to do well, thus paving the path to succeed in academics and social aspects of high school life (PGC, 2009).

A parent involvement component is built in the program, where family night events are held for all freshmen participants, their peer leaders, and parents/guardians. There were no family night events that occurred during this study. However, peer leaders participated in a one night, two day retreat to engage in a bonding experience and professional development. Peer leaders picked their co-facilitators towards the end of the retreat.

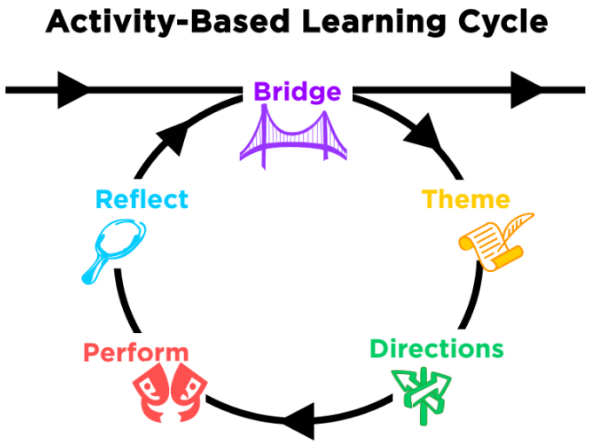

Figure 4. 2. Activity-based learning cycle in PGC High School (2015a).

Scope and Sequence. The scope and sequence of outreaches (Appendix H) consisted of about 26-activity based, prescribed sessions that encourage students to get to know each other and discuss common high school transition issues that freshmen students face. These topics include, but were not limited to goal setting, creating a caring

community, communicating effectively, identity development, and making sound decisions. The activity-based learning cycle (Figure 4.2) provides an illustration of how these outreach sessions are conducted; peer leaders connect each outreach session by providing a bridge from one outreach to another, explain the theme and the directions for the day's activity, participate in the activity, and reflect on how the activity provided new insights to improve navigation of the freshmen experience.

Peer Leaders. Faculty advisors team-taught a daily, year-long leadership course of 14 juniors and seniors. The peer leaders went through a vetting process where they applied for the program and participated in a group interview. Peer leaders earned an elective course credit that will go towards their graduation requirement. Peer leaders were separated in six groups, about two peer leaders each to conduct the outreach sessions to about 15 freshmen per group.

Figure 4. 3. The outreach cycle in PGC High School (2015a).

The Outreach Cycle. The peer leader experience consisted of a five-day outreach cycle where (a) peer leaders experience a new outreach, (b) prepare the outreach, (c) conduct outreach, (d) debrief the outreach experience, and (e) practice/build new

facilitation skills. Figure 4.3 is a diagram derived from the Peer Group Connection High School (2015a) handbook to illustrate the full cycle involved in preparing peer leaders for their weekly outreach sessions.

Lesson Plans. Peer leaders were provided lesson plans to help plan for the weekly outreach sessions. CSS provided the lesson plans for all twenty six outreach sessions which can be found in Peer Group Connection High School (2015b).

Faculty Advisors. Three school-based staff from School X were selected to become faculty advisors: (a) school librarian, (b) school counselor, and (c) health/physical education teacher. The school librarian and the health teacher were the teachers of record (classroom teachers), while the school counselor provided logistical and curriculum support. Faculty advisors participated in an intensive, eleven-day training regimen which included a one-day training conference and a four-day residential training conference. Faculty advisors also participated in a three-day residential training conference and three additional one-day training conferences during first 15 months of program implementation. Training included recruiting and selecting future peer leaders, PGC's theoretical basis, team-teaching and organizing the daily leadership course, conducting a three-day, two-night leadership training retreat for peer leaders, utilizing the curriculum, and enhancing facilitation skills.

Stakeholders. Two weeks before the 2015-2016 school year started, a group of school stakeholders came together to prepare for program implementation. Stakeholders included the principal, assistant principals, master scheduler, school counselor, the Baltimore regional trainer from CSS, and the director of college of career readiness for Baltimore City Public Schools. Topics covered during these meetings included how to

select participants, selecting faculty advisors, and ensuring the viability of the program for long-term growth and sustainability.

Teacher Ambassadors. Teacher ambassadors were comprised of eight faculty members who supervise and give continuous feedback to peer leaders during outreach sessions. Teacher ambassadors were observers and did not interrupt the outreach sessions unless there was a need to redirect the group or intervene due to safety reasons.

Data Analysis

Convenience Sampling. A convenience sample was used, where the participants come from a place that they can be easily reached (Wholey, 2010). Although convenience samples are not recommended for evaluations, it can be used when the objective is to learn more about some key issues (Wholey, 2010). Participants in the study were recruited from a convenience sample of freshmen students in a Baltimore City Public School.

Quantitative Analysis. Several steps were taken to code survey data in SPSS. Non-mentored and mentored students were coded (mentored = 1, non-mentored students = 2). Racial groups were coded (Black = 1, other = 2). Gender was coded (girls = 1, boys = 2). FGS was defined as a student whose parents(s) have not completed a bachelor's degree. Generational college status was coded (FGS = 1, NFGS = 2). The three main statistical computations used were (a) independent-samples t-test, (b) bivariate correlation, and (c) frequency.

Evaluation Story. An evaluation story is a brief narrative account of someone's experience that can vary in length from a few sentences to several pages (Wholey, 2010). An evaluation story can be used to gain insight into students' experience. Stories can be

used in evaluation studies to illustrate other data, augment quantitative methods, identify patterns and trends, and to offer insight on rare experiences (Wholey, 2010). Stories allow evaluators to make statements that are otherwise not possible with quantitative data alone, especially when accepted research protocols are used (Wholey, 2010). To be successful, evaluation stories should be deliberate, identify the source of each story, verifies stories with others who are familiar with the story, include a description of how the stories were captured, and include a statement by the evaluator about the extent to which the story represents other individuals with similar stories (Wholey, 2010). The study at hand utilized stories to augment quantitative methods to illustrate or amplify a point from quantitative findings through the End of Year Survey for Outreach Participants (Appendix F).

<table>
<tr><th>Indicator</th><th>Data Source</th><th>Population</th><th>Time</th></tr>
<tr><td>GPA, Failure Rates</td><td>Final grades</td><td rowspan="3">Non-mentored and mentored students</td><td>June, 2017</td></tr>
<tr><td>Social Capital, Demographic Information</td><td>SCS-R</td><td rowspan="4">February, 2017
-
April, 2017</td></tr>
<tr><td>Social Anxiety</td><td>SAS-A</td></tr>
<tr><td>College and Career Readiness
• Interpersonal skills
• Initiative
• Goal setting
• Collaboration
• Critical thinking
• Social-emotional</td><td>End of Year Survey for Outreach Participants</td><td>Mentored students</td></tr>
<tr><td>Evaluation Story</td><td>End of Year Survey for Outreach Participants</td><td>Mentored students</td></tr>
</table>

Figure 4. 4. Data Collection Matrix.

Data Collection. All survey responses were collected through Google Docs via a vanity link from the school's website. Figure 4.4 is a matrix of all the relevant constructs used in the study, data source, population, and time when data was collected.

Conclusion

This chapter reviews the methods and procedures to implement PGC. Figure 4.5 is a process model to summarize the problem of practice, intervention, targets, and projected outcomes.

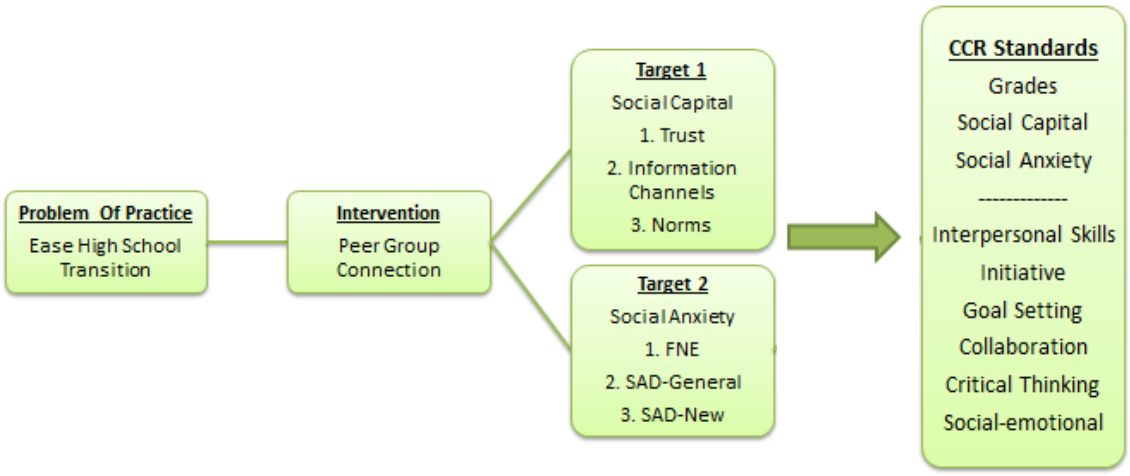

Figure 4. 5. Process evaluation of intervention.

Chapter 5

Findings and Implications for Practice

The goal of Chapter 5 is to present the findings for the research questions below. Limitations and implications will be discussed.

RQ1: Who needs the most support during the high school transition?

RQ2: What are the differences between non-mentored and mentored students?

RQ3: How does peer mentoring facilitate college and career readiness?

Frequencies

There were a total of 99 students that participated in the study. There were 45 students that participated in the control group (non-mentored) and 54 students in the experimental group (mentored). There were more girls (n = 57) than boys (n = 42) that participated. Racial breakdown was as follows: Asian (n = 5), Black (n = 63), Hispanic or Latino (n = 11), Biracial (n = 7), and White (n = 13). There were more FGS (n = 56) than NFGS (n = 43) that participated in the study.

Course Failures. Mostly everyone in the study passed all of their classes in the ninth grade. There were 4 students in the non-mentored (n = 4) and mentored (n = 4) group that failed 1 course. There was also 1 student in the non-mentored (n = 1) and mentored (n = 1) group that failed three courses. Each group had an even number of students that failed at least one or more courses (n = 5). In total, there were ten (N = 10) students that failed at least one or more courses during their freshman year. There were no significant differences in course failure between non-mentored (M = .1556, SD = .5203) and mentored (M = .1296, SD = .4776) students ($t(97) = 0.258$, p = .797).

Correlational Findings

Race and GPA

There was a significant positive correlation between GPA and race ($r(99) = .255$, $p < .05$). Black students in the sample were more likely to have a lower GPA when compared to other racial groups.

Gender and GPA

There was a significant positive correlation between GPA and gender. Girls were more likely to have a lower GPA ($r(99) = -.251$, $p < .05$) than boys.

Generational Status and GPA

There was a significant positive correlation between GPA and generational status ($r(99) = .221$, $p < .05$). FGS were more likely to have a lower GPA than NFGS.

Social Capital and GPA

There was no significant interaction between students' Trust Score and GPA ($r(99) = .175$, $p > .05$). There was a significant positive interaction between students' IC Score and GPA ($r(99) = .268$, $p < .01$). There was significant positive interaction between students' Norm Score and GPA ($r(99) = .325$, $p < .01$). There was a significant positive interaction between students' Overall Social Capital Score and GPA ($r(99) = .311$, $p < .01$).

Students with higher IC Score and/or Norm Score were more likely to have a higher GPA. Subsequently, students with a higher Overall Social Capital Score were more likely to have a higher GPA. Students with social capital, as operationalized by the Overall Social Capital Score, were more likely to have a higher GPA.

Social Anxiety and GPA

There was no significant interaction between students' FNE level and GPA ($r(99) = .144$, $p = .154$). There was no significant interaction between students' SAD-General level and GPA ($r(99) = .131$, $p = .131$). There was a significant positive interaction between students' SAD-New level and GPA ($r(99) = .204$, $p < .05$). There was no significant interaction between student's Overall Social Anxiety level and GPA ($r(99) = .177$, $p = .079$).

Social Anxiety and Gender

Based on the correlational findings, first-generation Black girls (FGBG) were more likely to have a lower GPA. Students with higher social capital were more likely to have a higher GPA. There were no significant interactions between social anxiety and GPA.

The correlational outputs prompted a closer look at demographic variables (gender, race, and generational college status) and their interactions with social capital and social anxiety.

After conducting bivariate correlational computations, race and generational status had no significant interactions with social capital and social anxiety. However, gender demonstrated numerous significant interactions with social anxiety, summarized in Table 5.1. Due to the number of significant interactions between gender and social anxiety, an independent samples t-test was conducted to assess if there were significant differences between gender and social anxiety.

Table 5. 1

Interactions between Demographics and Social Anxiety

	1	2	3	4	5	6	7	8
1.Gender	1	.155	.073	-.251*	-.211*	-.249*	-.280**	-.265**
2.FGS	.155	1	.058	.221*	-.010	-.052	-.060	-.039
3.Race	.073	.058	1	.255*	.079	.068	.095	.090
4.GPA	-.251*	.221*	.255*	1	.144	.131	.204*	.177
5.FNE	-.211*	-.010	.079	.144	1	.667**	.785**	.938**
6.SAD-G	-.249*	-.052	.068	.131	.667**	1	.768**	.838**
7.SAD-N	-.280**	-.060	.095	.204*	.785**	.768**	1	.934**
8.S.Anx	-.265**	-.039	.090	.177	.938**	.838**	.934**	1

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Social Anxiety and Girls

There was a significant negative correlation between gender and FNE ($r(99) = -.211$, $p < .05$), SAD-General ($r(99) = -.249$, $p < .05$), and the SAD-New ($r(99) = -.280$, $p < .01$) subscales. Girls in the sample were more likely to have a higher overall Social Anxiety level ($r(99) = -.265$, $p < .01$) than boys.

Fear of Negative Evaluation. There was a significant difference between girls' ($M = 20.2807$, $SD = 9.3498$) and boys' ($M = 16.7143$, $SD = 6.4478$) FNE level ($t(99) = 2.126$, $p = .036$).

Social Avoidance and Distress – General. There was a significant difference between girls' ($M = 9.5088$, $SD = 4.0183$) and boys' ($M = 7.6667$, $SD = 2.8683$) SAD-General level ($t(99) = 2.532$, $p = .013$).

Social Avoidance and Distress – New. There was a significant difference between girls' (M = 18.7368, SD = 6.809) and boys' (M = 15.1190, SD = 5.2041) SAD-New level ($t(99) = 2.878$, $p = .005$).

Overall Social Anxiety. There was a significant difference between girls' (M =48.5263, SD = 18.5839) and boys' (M = 39.5000, SD = 12.8845) Overall Social Anxiety level ($t(99) = 2.704$, $p = .008$).

Non-Mentored VS. Mentored Students

The freshman minority experience indicated the vulnerability of FGBG among the participants (N = 99). FGBG significantly experienced more social anxiety. FGBG were more likely to have a lower GPA.

Participant data was split between non-mentored and mentored students to assess if there are any differences among these groups.

GPA

End of freshman year GPA was collected. Non-mentored students had a slightly higher GPA (M = 2.765, SD = .8798) than the mentored students (M = 2.621, SD = .7688). The average GPA for both groups was a 2.687. There were no significant differences in GPA between non-mentored and mentored groups ($t(97) = 0.864$, $p = .389$).

Social Capital

Trust Score. There were no significant differences between non-mentored (M = 11.4889, SD = 2.7767) and mentored (M = 12.4444, SD = 2.0801) students' Trust Score ($t(97) = -1.955$, $p = .053$).

IC Score. There were no significant differences between non-mentored (M = 11.0889, SD = 2.9681) and mentored (M = 11.0185, SD = 2.4378) students' IC Score ($t(97) = 0.130$, $p = .897$).

Norm Score. There were no significant differences between non-mentored (M = 11.5111, SD = 2.5903) and mentored (M = 12.1667, SD = 1.7128) students' Norm Score $t(97) = -1.507$, $p = .135$).

Overall Social Capital. There were no significant differences between non-mentored (M = 34.0889, SD = 7.0801) and mentored (M = 35.6296, SD = 4.7950) students' Total Social Capital Score ($t(97) = -1.285$, $p = .202$).

Social Anxiety

Fear of Negative Evaluation. There were no significant differences between non-mentored (M = 19.9556, SD = 8.4771) and mentored (M = 17.7778, SD = 8.2751) students' FNE level ($t(97) = 1.289$, $p = .200$).

Social Avoidance and Distress-General. There were no significant differences between non-mentored (M = 9.288, SD = 3.9978) and the mentored (M = 8.2593, SD = 3.3488) student' SAD-General level ($t(97) = 1.395$, $p = .166$).

Social Avoidance and Distress-New. There were no significant differences between non-mentored (M = 17.5111, SD = 6.6763) and he mentored (M = 16.9444, SD = 6.2265) students' SAD-New level ($t(97) = 0.436$, $p = .644$).

Overall Social Anxiety. There were no significant differences between the non-mentored (M = 46.7556, SD = 17.6868) and mentored (M = 42.9816, SD = 16.2544) groups' overall Social Anxiety level ($t(97) = 1.105$, $p = .272$).

Social capital and social anxiety, along with its subscales, purported no significance between non-mentored and mentored students.

College and Career Readiness of Mentored Students

Although there were no significant differences in social capital and social anxiety between non-mentored and mentored students, findings show that freshmen FGBG in the sample were vulnerable to social anxiety and were more likely to have a lower GPA. These findings prompted a closer look at demographic variables as End of Year Feedback from Outreach Participants was analyzed. CCR standards were analyzed by using an independent samples t-test. Significant differences by gender and generational status were found.

As stated previously, there were more girls (n = 32) than boys (n = 22) in the mentored group. There were more Black (n = 36) than non-Black (n =18) students. There were more FGS (n =35) than NFGS (n = 19). There were a total of 54 students in the mentored group.

It is important to note that the operationalization of the constructs below attribute to how PGC has impacted mentored students as questions from The End of Year Feedback from Outreach Participants instructed students to indicate how much PGC has helped them in each CCR standard.

Interpersonal Skills

There was a significant difference between girls' (M = 30.0000, SD = 7.0573) and boys' (M = 25.4545, SD = 7.4560) interpersonal skills ($t(52) = 2.273$, p = .027). There was a significant difference between FGS (M = 29.9714, SD = 6.7234) and NFGS' (M = 24.7895, SD = 7.8639) interpersonal skills ($t(52) = 2.547$, p = .014). There was no

significant difference between Black (M = 29.3056, SD = 6.5631) and non-Black (M = 25.8333, SD = 8.8400) students' interpersonal skills ($t(52) = 1.629$, $p = .109$). Mentored girls who were FGS reported higher interpersonal skills.

Initiative

There was a significant difference between girls' (M = 18.4688, SD = 5.3339) and boys' (M = 15.3182, SD = 4.9221) initiative ($t(52) = 2.200$, $p = .032$). There was a significant difference between FGS (M = 18.2857, SD = 4.5605) and NFGS' (M = 15.1579, SD = 6.2027) initiative ($t(52) = 2.116$, $p = .039$). There was no significant difference between Black (M = 18.1389; SD = 49.693) and non-Black (M = 15.2778; SD = 5.727) students' initiative ($t(52) = 1.895$, $p = .064$). Mentored girls who were FGS reported higher initiative.

Goal Setting

There were no significant differences between girls' (M = 7.5938, SD = 2.1381) and boys' (M = 6.8182, SD = 2.3224) goal setting ($t(52) = 1.265$, $p = .212$). There was a significant difference between FGS (M = 7.8000, SD = .1.8278) and NFGS' (M = 6.3158, SD = 2.6045) goal setting ($t(52) = 2.446$, $p = .018$). There was no significant difference between Black (M = 7.6667; SD = 1.9420) and non-Black (M = 6.5000; SD = 2.5952) students' goal setting ($t(52) = 1.856$, $p = .069$). Mentored girls who were FGS reported higher goal setting.

Collaboration

There was a significant difference between the girls' (M = 11.6250, SD = 2.5746) and boys' (M =9.5909, SD = 2.9384) collaboration ($t(52) = 2.693$, $p = .010$). There was a significant difference between the FGS (M = 11.4571, SD = 2.5706) and NFGS' (M =

9.5789, *SD* = 3.0968) collaboration (*t*(52) = 2.384, *p* = .021). There was a significant difference between the Black (*M* = 11.3889, *SD* = 2.3937) and non-Black students' (*M* =9.6111, *SD* = 3.4494) collaboration (*t*(52) = 2.213, *p* = .031). Mentored FGBG had higher collaboration.

Critical Thinking

There were no significant differences between girls' (*M* = 15.1875, *SD* = 4.2154) and boys' (*M* = 13.7727, *SD* = 4.5243) critical thinking (*t*(52) = 1.176, *p* = .245). There was a significant difference between FGS (*M* = 15.6000, *SD* = 3.3624) and NFGS' (*M* = 12.7895, *SD* = 5.4014) critical thinking (*t*(52) = 2.358, *p* = .022). There was no significant difference between Black (*M* = 15.1667, *SD* = 3.6527) and non-Black (*M* = 13.5000, *SD* = 5.4584) students' critical thinking (*t*(52) = 1.334, *p* = .182). Mentored girls who were FGS reported higher critical thinking than males.

Social-Emotional

There was a significant difference between girls' (*M* = 11.2500, *SD* = 3.0900) and boys' (*M* =9.4545, *SD* = 2.8069) social-emotional development (*t*(52) = 2.693, *p* = .010). There were no significant differences between FGS (*M* = 11.0857, *SD* = 2.6829) and NFGS' (*M* = 9.4737, *SD* = 3.5491) social-emotional development (*t*(52) = 1.879, *p* = .066). There was no significant difference between Black (*M* = 10.9167; *SD* = 2.8221) and non-Black (*M* = 9.7222; *SD* = 3.4946) students' social-emotional development (*t*(52) = 1.353, *p* = .182). Mentored girls who were FGS had reported higher social-emotional development.

GPA

Girls (M = 2.8338, SD = .7134) had a significantly higher GPA than boys (M =2.3136, SD = .7566) in the mentored group ($t(52) = 2.568$, $p = .013$). There was no significant difference between FGS (M = 2.5154; SD = .7713) and NFGS' (M = 2.8179; SD = 0.7442) GPA ($t(52) = -1.393$, $p = .170$).There was no significant difference between Black (M = 2.5431; SD = .6915) and non-Black (M = 2.7794; SD = 0.9048) students' GPA ($t(52) = -1.066$, $p = .291$).

Results appear to describe the positive effects that peer mentoring has on female students. A summary of students' responses per item on CCR is attached on Appendix I.

Mentoring Effects on College and Career Readiness and High School Transition

Correlational outputs from the participant pool highlighted the freshman minority experience and the vulnerability of FGBG. Girls experienced higher social anxiety and FGBG were more likely to have a lower GPA. Peer mentoring was used as an intervention but warranted no significant differences between non-mentored and mentored students and GPA, social capital, and social anxiety.

However, upon investigation of CCR standards among the mentored students, it was found that first-generation girls reported a significantly higher CCR in the areas of interpersonal skills and initiative. FGBG had a significantly higher collaboration than boys. Girls overall had a significantly higher GPA and social-emotional development than boys.

Results appear to indicate that peer mentoring was especially helpful for the vulnerable population identified, FGBG. In fact, girls were significantly more likely to indicate looking forward to meeting with their peer group ($r(54) = -.316$, $p < .05$). Black

students were significantly more likely to indicate that their peer leaders cared about them ($r(54) = -.347$, $p < .01$). Overall, freshmen looked forward to meeting their peer group and felt that their peer leaders cared about them. Figure 5.1 is a summary of how freshmen responded to how much they looked forward to meeting with their peer group and how much they felt that their peer leaders cared about them. Using a 5-point Likert scale (*1* = not at all, *2* = very little, *3* = somewhat, *4* = quite a bit, *5* = a great amount), average ratings suggest that for the most part, freshmen looked forward to meeting with their peer group ($M = 3.22$) and felt that their peer leaders cared about them ($M = 4.01$).

		1 Not at All	2 Very Little	3 Somewhat	4 Quite a Bit	5 A Great Amount	Mean
How much did you look forward to meeting with your peer group?	% N	9.3% 5	18.5% 10	27.8% 15	29.6% 16	14.8% 8	3.222
How much did you feel your peer leaders cared about you?	% N	0	5.6% 3	16.7% 9	48.1% 26	29.6% 16	4.018

Figure 5. 1. Freshmen feelings and excitement toward peer group.

Mentored Students' Voices

When mentored freshmen were asked to explain their response on how much they looked forward to meeting with their peer group, a student said "I didn't care much for it" (T.V, personal communication, February 23, 2017). K.H said "I don't like meeting new people or trying new things" (Personal communication, March 22, 2017). Another student said "I was not interested in PGC, I rather stay in Gym and Health on Thursdays" (T.T, personal communication, March 22, 2017).

Some students cited easing the stress of high school transition.

A.C said:

> I was looking forward to meeting my peer group because it gives me more people to talk to. When I came to this school, I didn't talk to anyone and now I have lots and lots of friends" (Personal communication, March 22, 2017).

A.W shared:

> It was a time for me to take time out of the week and looking on things I need to do and need to fix. It has helped me with my stressful school life here" (Personal communication, April 20, 2017).

S.Y encapsulated what most of her peers shared about peer group.

S.Y wrote:

> Having PGC was a nice way to just take a break from all the stress or problems I would have in school, home or otherwise. Though at times I didn't feel like participating, the experience was rather therapeutic and relaxing. The people I was grouped with were kind and funny, making my day a bit better than it would be without PGC. I think that honestly, I really liked the time off from Gym or Health. Going to PGC has become a safe place for me (Personal communication, February 23, 2017).

When mentored students were asked to respond to how much they felt that their peer leaders cared about them, most students had positive things to say. There was a consistent response to how upperclassmen acknowledged freshmen outside of PGC. On students said "They always say hi to me in the halls. It makes me feel special" (G.F, personal communication, February 23, 2017).

M.P said:

> My leaders were pretty open with us and talked to us outside of PGC. They even told us that they want to connect and get to know us (Personal communication, April 20, 2017).

There was an overwhelming response on how freshmen cited that their peer leaders provided academic and social-emotional support. A.M stated "They cared if you had good grades and they would be upset with you if you didn't show up when you

should have" (Personal communication, March 22, 2017). K.C wrote "I looked forward to some of the things we talked about like preparing for midterms because things like that help me out in school" (Personal communication, March 22, 2017). N.M stated "They were always nice to me and whenever I looked upset, they would ask what was bothering me and it always made me feel better" (Personal communication, February 23, 2017).

C.L highlighted the impact of having upperclassmen support the freshman transition:

> My peer leaders were very kind, and I loved them a lot as they were often understanding and accepting of the different situations each freshman was in. They did this thing where they would praise my peers and me with compliments after sharing out. Sometimes, it was embarrassing, but it was just really nice to hear a compliment after a long day of putting myself down. My peer leaders were simply easy to get along with, especially…. (Personal communication, February 23, 2017).

Mentored students were asked to describe one way that PGC has been important to them. Responses revolved around the theme of academic, social capital, and social-emotional support. J.P shared "PGC made me set goals and influenced me to go to class" (Personal communication, February 23, 2017). M.D wrote "PGC helped me to communicate with peers who I wouldn't have thought to talk to" (Personal communication, March 22, 2017).

A couple students summarized their peers' experience regarding the importance of PGC.

C.G shared:

> PGC has been really important because I had considered it as a safe place. The experience was meant to be confidential and it truly felt like I would be okay. Just talking to people about my problems helped me deal with them. It would feel like a huge weight had been off my shoulders. I think PGC to me was a way for me to disconnect myself from negativity, which was really important for me (Personal communication, February 23, 2017).

M.P wrote:

> PGC helped me talk to the people in my class (2020) more. I'm in the Ingenuity Project and this is my 4th year in the program so it's kind of hard to get out of that "Ingenuity bubble", even though it was highly suggested to do so. In PGC, I've been able to talk to more of my peers outside of the Ingenuity Project, which I highly doubt I would've done on my own due to my shyness (Personal communication, April 20, 2017).

Improvement. Participants were asked what would make PGC better. Overwhelmingly, participants asked for snacks. Second, participants conveyed their interests in having a competitive sports component where students compete with other PGC groups in basketball, kickball, and other team sports. Some asked for field trips or to use PGC to walk around campus to get sunshine. Lastly, participants conveyed having PGC more than once a week.

A.W shared:

> PGC would better if we met up more than once a week. Sometimes we don't see our peer leaders and it makes me mad because I need to see them at least once in a while! (Personal communication, April 20, 2017).

M.P shared:

> PGC would be better if we had more consistent meetings. We're supposed to have it every Thursday, but that didn't work sometimes. When I don't have PGC, I get pretty disappointed. (Personal communication, April 20, 2017).

Social Capital

Overall Social Capital Score was negatively correlated with the FNE ($r(99) = -.311$, $p < .01$), SAD-General ($r(99) = -.341$, $p < .01$), and SAD-New ($r(99) = -.234$, $p < .01$) subscales. There was significant negative correlation between Overall Social Capital Score and Overall Social Anxiety ($r(99) = -.317$, $p < .01$). Students with higher social capital were more likely to have less social anxiety.

The Overall Social Capital Score was correlated to two CCR standards. Social capital was positively correlated with initiative ($r(54) = .327$, $p < .05$) and social-emotional development ($r(54) = .404$, $p < .01$).

Summary of Findings

Correlational outputs and an independent samples t-test between gender and social anxiety illuminated the freshman minority experience and the vulnerability of FGBG (Figure 5.2). Girls significantly experienced higher social anxiety, and FGBG were more likely to have a lower GPA. This answer to RQ1 laid the foundation as it provided a lens on how to view the rest of the data and the significance of gender, race, and generational status.

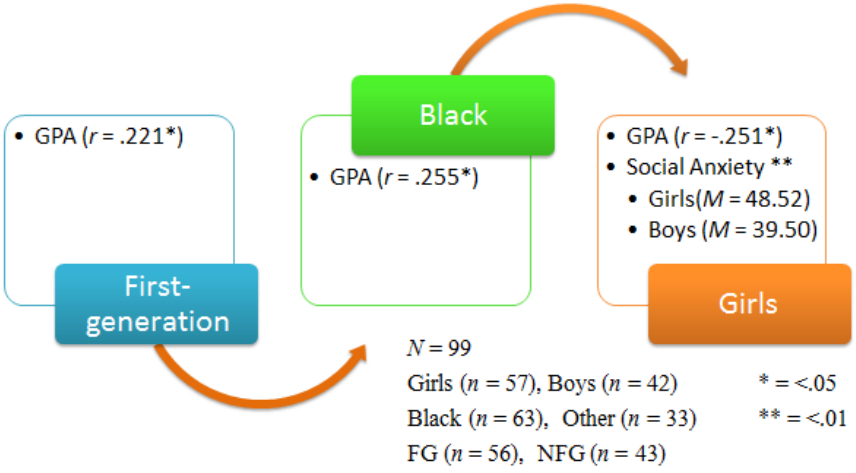

Figure 5. 2. The freshman minority experience

RQ2, through an independent samples t-test between non-mentored and mentored students, revealed that there were no significant statistical differences between the groups. Although there were no significant differences in GPA, social capital, and social anxiety levels between non-mentored and mentored students, mentored students had higher social capital and lower social anxiety means (Figure 5.3).

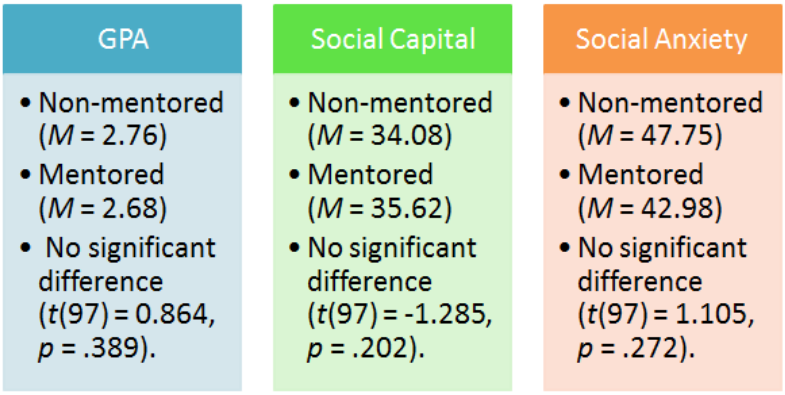

Figure 5. 3. Mean differences between non-mentored and mentored students

When mentored students were split by gender, there were significant differences in CCR. First-generation girls reported significantly higher CCR in the areas of interpersonal skills and initiative. FGBG had a significantly higher collaboration. Girls overall had a significantly higher GPA and social-emotional development than boys. This answer to RQ3 suggests that peer mentoring benefited FGBG, the same vulnerable group that was identified in RQ1.

Mentored students' responses to open ended questions were recorded. For the most part, PGC students looked forward to meeting with their peer group (Figure 5.1), benefited from the capital of having a peer-mentor, and was impacted by easing some of the stresses of high school transition. Participants asked for more contact time with their peer leaders and activities that are competitive in nature outside of the classroom.

There was an interaction between GPA, social anxiety, and social capital. Students with higher social capital are more likely to have a higher GPA and lower social anxiety. Students with higher social capital were also more likely to have higher initiative and social-emotional development.

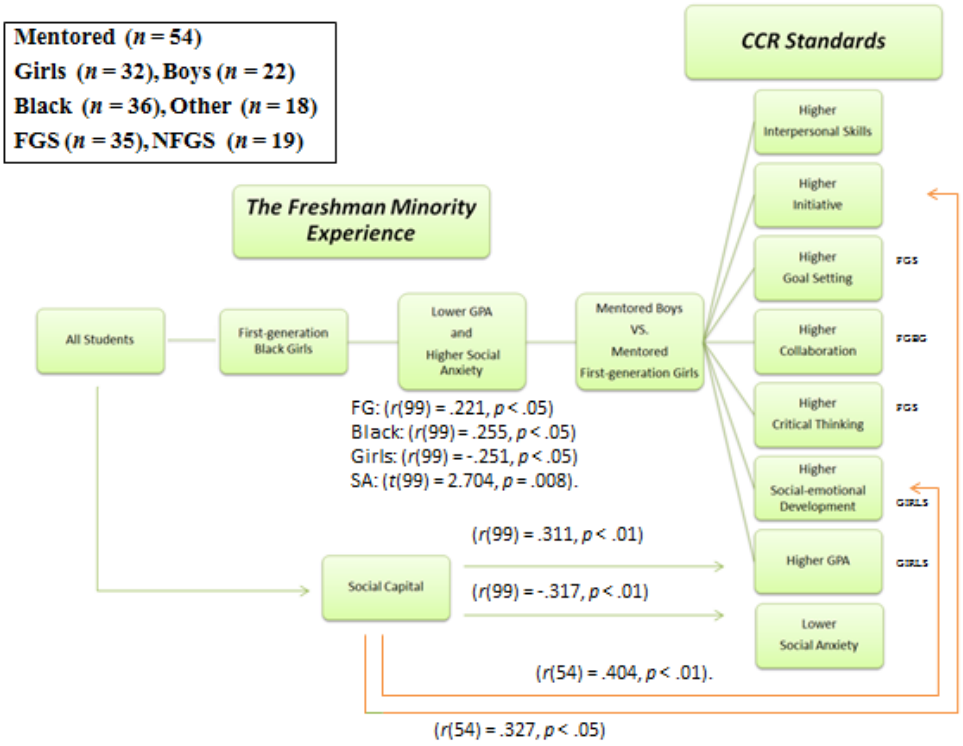

Figure 5. 4. The observed effects of peer mentoring and social capital

Based on the findings from RQ1-RQ3 and students' narratives, PGC had an effect on easing the middle school to high school transition, especially for FGBG. Social capital was associated with a higher GPA, lower social anxiety levels, higher social-emotional development, and higher initiative. It was observed that peer mentoring helped influence to ease the middle school to high school transition by facilitating CCR. Social capital supported these interactions through its associations with GPA, social anxiety, social-emotional development, and initiative. Figure 5.4 is an illustration of the aforementioned results (RQ1 and RQ3). Figure 5.5 is an illustration of RQ3 only.

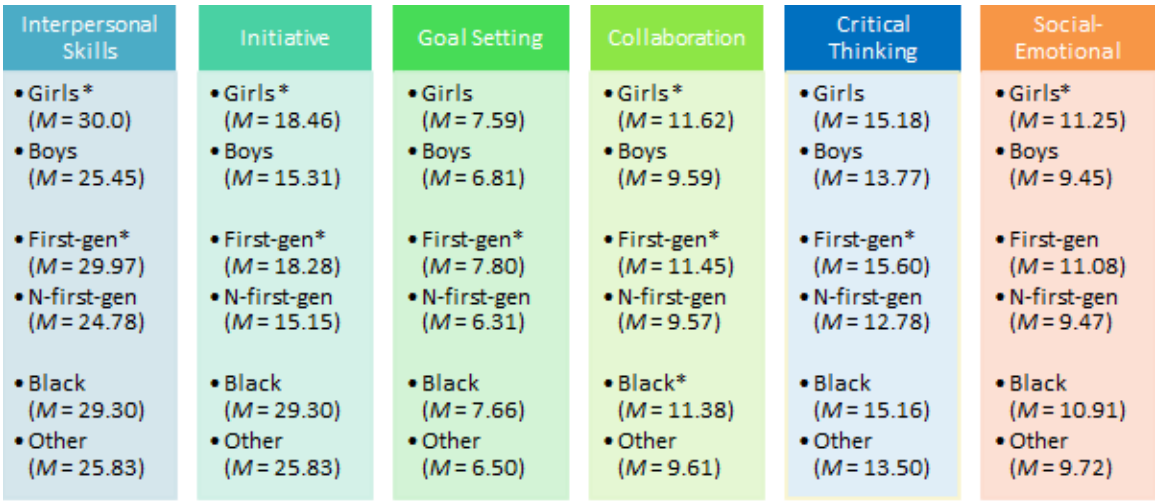

Figure 5. 5. Gender, first-generation status, race, and college and career readiness

Conclusion

The middle school to high school transition can have debilitating effects on, but not limited to, GPA, attendance, school belonging, anxiety, loneliness, and other academic, social, and emotional variables (Benner & Graham, 2009; Isakson & Jarvis, 1999; Barber & Olsen, 2006; Uvaas & McKevitt, 2013). These effects are often influenced by gender, race, and socio-economic status (Cohen & Smerdon, 2009; Benner & Graham, 2009). Results in this study were consistent with previous research findings which studied the effects of the middle school to high school transition.

Gender and its influence on the middle school to high school transition were present in this study. Girls in the study experienced significantly higher social anxiety. This finding is consistent with the literature on the effects of gender during the high school transition. A study found that girls had higher anxiety levels and loneliness across the transition, and experienced a faster decline in GPA than boys after the transition (Benner & Graham, 2009). In another study, girls were found to have greater concerns

about feelings of social inadequacy and reported more concerns about the social and academic changes of the middle school to high school transition (La Greca & Lopez, 1998). Cavanagh et al. (2007) suggests a biological perspective. It was found that girls who mature earlier were more likely to have lower GPAs and were more likely to fail a course (Cavanagh et al., 2007).

Results highlight the freshman minority experience. The influence of socioeconomic status and race was reflected by how FGBG in the study were more likely to have a lower GPA when compared to boys. Previous research on the effects of socioeconomic status and race were consistent with what the FGBG in this study experienced. Benner and Graham (2009) found that Black and Latino students had a lower sense of school belonging, a decrease in GPA, and an increase in absences when the representation of their ethnic group dramatically declined from middle school to high school. In another study, Akos and Galassi (2004) found that Latino students experienced greater losses in academic achievement in the first year of transition and reported the transition to be more difficult when compared to White and Black students (Akos & Galassi, 2004). Salazar and Dornbusch (1995) found that students with lower socioeconomic status significantly reported less access to school-based resources and social capital. Salazar and Dornbusch (1995) suggest that many students of working-class and minority backgrounds have less access to school resources. In fact, NOSCA (2012) reported that schools with higher numbers of students of color and higher numbers of students on free and reduced lunch also had higher student to counselor ratios. McDonough (1997, 2005) indicated that schools with a high number of low-income

students or students of color were less likely to provide counseling due to the large number of caseloads.

Previous research and findings from this study together suggest that gender, race, and socioeconomic influences were present during the middle school to high school transition at School X. In fact, for students in School X, the influence of gender, race, and socioeconomic status were all expressed by FGBG and their vulnerability to the middle school to high school transition. Girls significantly experienced higher social anxiety and FGBG were more likely to have a lower GPA.

Literature suggests that there is a need for programs that facilitate help-seeking behaviors, supportive ties to peers, collaborative learning, and formation of pro-social, supportive relations that break down socioeconomic barriers (Stanton-Salazar, 1997). Mentoring was suggested to alleviate gender, racial, and socioeconomic barriers because it can be tailored to students' individual, cultural, racial, and diverse needs (Ross, 2016). Peer mentoring through PGC was hypothesized to ease the negative effects of the middle school to high school transition. In this study, PGC was found to have significant positive effects on mentored girls' GPAs and CCR when compared to mentored boys. First-generation girls reported a significantly higher CCR in the areas of interpersonal skills, initiative, goal setting, critical thinking, and social-emotional development. FGBG had a significantly higher collaboration. Girls overall had a significantly higher GPA than boys. Peer mentoring benefited FGBG, the same vulnerable group that was previously identified.

Upon determining what a successful high school transition looks like, it was defined in this study as students being prepared to become college and career ready. This

was aligned with First Lady Michelle Obama's *Reach Higher Initiative*; a national push to enhance CCR of high school students in which the role of school counselors in assisting students with academics, CCR, and postsecondary planning has been in the forefront (ASCA, 2012). Through PGC, CCR was addressed in many significant ways. First, through students' narratives, there seems to be a consensus that PGC students looked forward to meeting with their peer group, benefited from the social capital of having a peer-mentor, and were relieved of some of the stresses of high school transition. In fact, participants asked for more contact time with their peer leaders. Secondly, students in PGC responded favorably on the 25-item End of Year Survey for Outreach Participants (Appendix I). Students indicated that PGC helped them in, but not limited to, caring more about attending school every day, feeling like they belonged at school, care more about staying focused to do well in school, and overcoming setbacks to achieve important goals. Lastly, PGC produced favorable CCR outcomes. First-generation girls reported a significantly higher CCR in the areas of interpersonal skills and initiative. FGBG had a significantly higher collaboration. Girls overall had a significantly higher GPA and social-emotional development than boys. As school counselors in urban school districts like BCPSS are faced with the reality that a high number of low-income students or students of color are less likely to access student support services due to the high student to counselor ratios (Cholewa et al., 2016), PGC has the potential to supplement CCR initiatives in School X.

Social capital supplemented CCR. Students with higher social capital were more likely to have a higher GPA and lower social anxiety. Students with higher social capital were also more likely to have higher initiative and social-emotional development.

These observations of PGC and social capital's impact on the high school transition illustrate strong evidence to suggest that peer mentoring is a worthwhile investment in facilitating success for youth.

As Baltimore City is experiencing troubles and tribulations in the community, it is inevitable for these issues to bleed inside the school walls. As the Coleman Report highlighted, areas with a high concentration of poverty puts schools and institutional agents in a position to produce creative interventions that move students towards educational success (Rice & Alexander, 2013). PGC is one of those creative programming options, an institutional support (Stanton-Salazar, 2010) that is preventative in nature and invites all stakeholders to take part in the celebration of success. While this dissertation illuminated a vulnerable group (FGBG) within the walls of School X, PGC was observed to influence positive effects on their CCR.

School X has found a program that supports positive academic, social, and CCR outcomes for students and it has the potential to make a lasting impact on their lives.

Implications for Practice

Effective High School Transition Supports

MacIver and Epstein (1991) suggests that group advisory periods, interdisciplinary teacher teaming, students attending classes in the new school before transition, summer meeting between students and high school teachers, and buddy programs were all effective transition practices that helped student adjust to the new school. In fact, when additional programs were implemented, principals reported greater student retention and lower dropout rates (MacIver & Epstein, 1991). In schools where there are fewer resources, or limited capabilities to implement the programs above,

implementing PGC may address easing the high school transition and many other school climate/culture issues. In addition to PGC's impact on academic, social, and CCR, findings in this study suggest that PGC has the capability to create a safe and caring community across grade levels. Upperclassmen acknowledged underclassmen outside of the classroom. Underclassmen engaged with their peers outside of their social circle. Due to the many supports that are available through CSS in implementing a peer mentoring program (training, curriculum support, consultation), PGC is a cost-effective option that may produce more benefits than advisory or buddy programs alone.

Investment in PGC. Freshmen for the most part reported positive comments about their participation in PGC (Figure 5.1). Appendix I, results, and students' narratives are just a preview of how PGC has made an impact on students' freshmen experience. Investment in PGC would enable the program to flourish and reach more students.

Funding. The PGC retreat for peer-leaders is an essential milestone for the upperclassmen, with whom the freshmen have primary contact. The PGC retreat is important because it facilitates bonds amongst the group, sets the tone for the year, and culminates in a partner selection process. The quality of the peer leader, authenticity, and commitment to peer mentoring were found to be more important than the program curricula (Karcher, 2005). Not having the funds to allow peer leaders to go on a retreat may be more damaging to freshmen than not having a mentor at all.

Bell Schedule. Freshmen indicated an interest in receiving snacks and more time for them to bond with their peer leaders and other mentees through organized team sports. It is worth the time and effort to problem solve how to allocate time for these events to occur during the regular school day. School X's bell schedule only allots 45

minutes per class period. Perhaps having A/B days would create an opportunity for students to have more valuable time in PGC and as well as other classes to engage with students. Having A/B days would especially benefit science classes with lab components. Conducting science experiments within a 45 minute class period causes students to rush while handling sensitive biological/chemical/engineering equipment. A/B days would benefit more classes other than PGC to participate in experiential learning.

Planning. PGC has many components to it that can strengthen its visibility and buy-in from the school community. Parent nights, freshmen orientation, service, and volunteering for the school community along with supervision of peer leaders require significant planning time from the advisors. It is suggested for PGC advisors to have dedicated planning time allotted in their roles and responsibilities at School X. Similar to department chairs that have a reduced course load to teach, PGC should be viewed as an academic course and not a traditional elective or an extra duty.

Hiring Practices from the District Level. Similar to other hiring practices for traditional positions such as teacher, school counselor, librarian, or administrator, it is recommended for Human Resources to conduct an application process strictly for the PGC advisor position. To reach 350 freshmen who are split into small groups of 10, about 35 pairs of peer leaders or 70 upperclassmen are required. Seventy upperclassmen split into a PGC class of 14 will require an advisor to have a full caseload of 5 sections. School X being in a seven-period day, dedicated PGC advisors would ensure that the benefits of peer mentoring are reaching all freshmen in school. Surrounding school districts such as Anne Arundel County Public Schools have hiring practices exclusively

for a similar support program called AVID. AVID teachers are hired solely to implement the AVID curriculum to facilitate CCR among historically marginalized groups.

School Counseling and College and Career Readiness

BCPSS is starting the 2017-2018 school year with only 85 school counselors for about 80,000+ students. This high student to counselor ratio is a barrier to addressing every student's academic, social-emotional, and CCR needs. For school counselors who are looking to find a way to reach more students, PGC can be a program to empower upperclassmen to use their leadership skills by mentoring freshmen. Findings suggest that utilizing students, an underutilized resource, can have significant impacts on their own peers. With proper support and supervision of peer leaders, the effectiveness of peer mentoring may produce systematic results. For example, school counselors' skill sets are uniquely positioned to supplement students' access to college by increasing the necessary social capital required to make informed and calculated decisions (Bryan et al., 2011). Students who accessed college information from their school counselors were more likely to apply and enroll in college (Bryan et al, 2011). Bryan et al. (2011) found that students in the lowest socioeconomic status quartiles who did not have a counselor contact had significantly lower odds of applying to two or more colleges. Additionally, in a national survey of 55 thousand students, only about 45 percent felt positively about their college and career readiness (YouthTruth, 2017). Alarmingly, even though students felt that counseling services were helpful, only about half used them (YouthTruth, 2017).

School Counseling Referrals. PGC may increase the perception of the school counseling office as a more inviting setting. Training upperclassmen to be ambassadors for the school enabled the counseling office to become more visible. PGC leaders were

briefed on the different resources available in school and how to best access them. Throughout the year, there were counseling referrals that came directly from the peer leaders themselves. Mentored students' voices suggest that some freshmen were more comfortable with their peer leaders than school staff. Peer leaders bridged this gap. The nationwide YouthTruth (2017) survey suggests that most students do not access counseling services even though most found it useful. PGC allows school counselors and staff to leverage students' abilities to impact their own school community by allowing the opportunity for upper classmen to challenge freshmen's hesitation to seek help when necessary.

College Readiness. School X has a math oriented curriculum to prepare students for science and engineering fields. In general, girls' and boys' scores are on par when taking mathematics and science standardized tests (National Science Foundation [NSF], 2016a). However, larger gaps exist between students when racial and family income is taken into account (NSF, 2016a). White and Asian/Pacific Islander students and those who come from high socio-economic status, score higher than Black or Hispanic students or those who come from lower income families (NSF, 2016a). Although girls enroll in advanced science courses at comparable rates, girls are less likely to take advanced level AP exams in Calculus BC, Physics B, Physics C, and Computer Science (NSF, 2016a). In 2012, 11.2% of bachelor's, 8.2% of master's, and 4.1% of doctorate degrees in science and engineering were awarded to minority women in the United States. In the workforce, only 29% of women are in the science and engineering fields (NSF, 2016b). Minority women comprise fewer than 1 in 10 employed scientists and engineers (NSF, 2016b).

Consistent with the literature on the effects of gender (Benner & Graham, 2009; La Greca & Lopez, 1998; Cavanagh et al., 2007), race (Benner & Graham, 2009; Akos & Galassi, 2004), and socioeconomic status (Salazar & Dornbush, 1995; NOSCA, 2012) on the middle to high school transition and academic outcomes, these finding by NSF (2016a, 2016b) suggest the long-term negative implications of gender, racial, and socioeconomic influence of the middle to high school transition. Results from this study highlight the importance of utilizing PGC, as it addressed the vulnerability of girls (who significantly experienced higher social anxiety) and FGBG (who were more likely to have lower GPAs). Results from this study highlight PGC's potential to remediate these gaps as mentored students in the study were found to impact FGBG' GPAs and CCR.

Career Readiness. Findings support peer mentoring as an intervention to combat issues of gender inequity which could reach beyond college. In terms of career readiness and where women stand, the United States ranks 26th in the world in economic gender equality (Zahidi, 2016). Women's earnings average to about 65% of what men earn (Zahidi, 2016). According to Zahidi (2016), only 27% in parliamentary positions are women, with only 1 in 5 members of congress and only 1 in 4 cabinet members are women. There has never been a woman president in the United States. Empowering girls for success can change biases and perceptions about women in leadership (Zahidi, 2016). Diversity leads to creative and robust decision making in the workplace and in politics (Zahidi, 2016). It has also been shown that in countries where there are women in political leadership, economic inequality is low between income groups and genders (Zahidi, 2016). When women are in leadership roles, decisions tend to become more representative of other women's needs such as healthcare (Zahidi, 2016).

Skills for Success. CCR, as it was defined in this study, emphasized SFS. Maryland includes a competency in SFS in its definition of describing a student who is college and career ready. This study utilized many of the SFS categories such as interpersonal skills, initiative, goal setting, critical thinking, collaboration, and social-emotional development. Tooley and Bornfreund (2014) suggest that there is a need to promote a more holistic approach to school assessment and accountability. Tooley and Bornfreund (2014) suggest that school leaders must be held accountable to develop students' SFS in all grade levels. In the midst of "high stakes" testing, SFS is often pushed to the side. PGC in this study was found to be a vehicle to facilitate CCR.

Implications for the School Counselor. As findings in this study highlight the benefits of PGC in alleviating the middle school to high school transition, FGBG reported needing support services the most and at the same time showed significant gains when given a peer mentor. Specifically, when given a peer mentor, first-generation girls reported higher interpersonal skills and initiative. FGBG reported higher collaboration. Girls overall had a significantly higher GPA and social-emotional development than boys. Social capital was found to support peer mentoring through its interactions with GPA, social-emotional development, initiative, and social anxiety. Findings suggest that peer mentoring benefited FGBG, the same vulnerable group that was identified in the freshman minority experience.

Results from this study and the use of data informed a picture of a situation as it relates to student needs and issues to higher levels of success. As the role of the school counselor has changed over the years, the implementation of PGC in this study by a school counselor may have contributed to clarify the role. House and Hayes (2002)

suggest that when counseling programs are designed to enhance student achievement, school counselors gain recognition as key players in educational reform efforts. As school counselors implement programs and interventions to impact academic success, it is imperative for school counselors to focus on student achievement by integrating conclusions and decisions on data, research, and professional standards (Dahir & Stone, 2005). Data collection and analysis of PGC in this study is an example of how school counselors may demonstrate student improvement by moving critical data elements and aligning program goals to school improvement plans (Dahir & Stone, 2005). In addition, PGC was culturally relevant, developmentally appropriate, and addressed students' concerns as they navigate the unrests that are attached with living in Baltimore City. PGC as a component of a school counseling program requires counselors to participate in ongoing professional development in mentoring, program implementation, and data accountability. As suggested by ASCA (2012), comprehensive school counseling programs should focus on student outcomes, incorporate organizational assessments and tools, utilize curriculums that consist of structured lessons designed to help students attain desired competencies, and demonstrate the effectiveness of the school counseling program in measurable terms.

Limitations

This section addresses threats to internal validity and general limitations.

Threats to Internal Validity

There are three threats to internal validity that may have had an influence in the outcome of the study.

Selection. The primary limitation to this study is the utilization of a convenience sample. Usually, participants are assigned to an experimental group based on a pretest in order to produce a comparison of equal groups (Wholey, 2010). Based on the pretest, random allocation is enacted to form groups that are similar in all known and unknown characteristics (Wholey, 2010). Random assignment allows researchers to make conclusions that the differences observed are likely to be due to the treatment and not because of the differences between groups (Shadish, Cook, & Campbell, 2002). Due to this threat to validity, causal inferences on this study are limited.

Maturation. The second threat to internal validity is maturation, or the natural changes that would occur even without the intervention (Shadish et al., 2002). Additionally, there was no measure of how existing supports may have impacted students' high school transition. Transitional supports that were available at School X include a Summer Bridge program, where freshmen took a refresher course in Algebra prior to school beginning in the Fall. In addition to math instruction, freshmen were able to meet fellow students prior to the opening of school. Summer Bridge allowed students to get familiar with the layout of the building to avoid getting lost in the first day of school. Additional transitional supports in School X include inviting rising freshmen for orientation, advisory, and other initiatives that school staff employs such as grade level guidance counseling lessons that occur seven times a year to discuss freshmen related issues such as transition.

The last threat to internal validity is dosage. Dosage may entail duration, frequency, and quality of the intervention.

Duration. The duration of PGC in this study was interrupted. Peer leaders did not meet their freshmen prior to October 6, 2016, about six weeks after the first day of school. This time was used to train upperclassmen to become peer leaders. Additionally, PGC stopped before AP exams started on May 1, 2017. Freshmen were not able to meet with their peer leaders during May and for the majority of June. Duration could be strengthened in future studies by having peer leaders meet with freshmen on the first day of school or earlier during summer freshmen programs such as summer bridge. Duration could also be lengthened if PGC can occur until the last day of school so that freshmen can benefit from upperclassman about studying for final exams and test taking skills.

Frequency. Although peer leaders met with freshmen every Thursday, there were some weeks, due to testing or assemblies, where they were not able to meet. Student narratives mentioned that freshmen were impacted by this interruption and could have affected freshmen views about their peer mentors. However for the most part, there was a sense of routine and continuation as assemblies and test did not land on a Thursdays too frequently. Attendance was taken and submitted to freshmen teachers to instill a sense of accountability for showing up to PGC.

Quality. The quality of the peer leaders was not assessed in this study. Karcher (2005) suggests that mentors can sometimes be more harmful than helpful. Although we would like to think that all of the peer leaders had quality interactions with their freshmen, there were some incidents during the year where advisors had to pull peer leaders out of the classroom. Continuous feedback, supervision, and weekly classroom observations from the advisors helped control for quality. Additionally, peer leaders were

never alone. Peer leaders worked in pairs, and they always had an adult in the room to supervise.

To control for internal validity, an evaluation story was used to shed light to issues that are not predictable and repetitive which traditional scientific methods tend to do (Wholey, 2010). By using student quotes and combining it with quantitative analyses, there was an opportunity to attain a valid estimate of the mentoring effect.

General Limitations

There were multiple steps taken to ensure a reliable measurement of social capital, social anxiety, and CCR. Primarily, Cronbach's alpha was calculated to ensure that each questionnaire item acted as a unified construct. Reliability was further investigated by correlating each questionnaire item. Results posited favorable alpha and correlational values. Nevertheless, there is room to improve questionnaire items. For example, the study would benefit from redistributing the surveys to compare results. This way, if results are repeatedly similar, one can argue that the measurements truly captured valid and reliable constructs.

The generalizability of the findings is limited due to the limited sample size of 99 participants. The study could have benefited from more participants inside and outside of School X. Although results are not generalizable, there may be limited generalizability within School X. This may prove valuable in program evaluation that is specific to the implementation of PGC in School X.

The methods utilized were observational or relational in nature. Peer mentoring did not cause students to attain the outcomes that they experienced. Rather, the study suggests that there is a very high probability that peer mentoring may influence youth to

gain positive academic, social, and CCR outcomes. Although findings suggest that PGC mitigates some of the negative effects on the middle school to high school transition, gender, racial, and socioeconomic influence on the human condition are widespread and unpredictable. There is a need for programs to address these systemic issues that goes beyond mentoring, perhaps at the local, district, or policy level.

Future Directions

Findings in this study provide a glimpse of vulnerable populations in School X. It is worth to share these results with future peer leaders. Perhaps peer leaders' own experiences would illuminate other relevant information that may have been overlooked. It is just as imperative to share the findings of the study to other stakeholders at the school, district, and community level to open conversations about the freshman minority experience and the benefits of peer mentoring. Engaging stakeholders may garner support and investment in growing PGC to ease the middle school to high school transition for all students.

School X is one of 12 schools in BCPSS that offer PGC. Each school is unique and has implemented PGC to fit their needs. As PGC is making its way in more schools, it is worthwhile to further investigate its impact on CCR. Although the instruments in this study can easily be shared with other schools, a bigger conversation around program evaluation and the importance of aligning PGC goals with district initiatives is essential. It is suggested to provide PGC schools an opportunity to share ideas with each other during professional development days to foster collaboration, support, and partnerships. These networks can easily transform itself into a bigger entity to establish peer mentoring

programs throughout BCPSS to assist students throughout their elementary, middle, and high school experience.

Future research may entail the impact of PGC on peer leaders. For example, as PGC at School X is entering its third year, it was observed that past mentees have registered to become peer mentors themselves. Additionally, some peer mentors who graduated high school continued their work as mentors and have illustrated interests in helping careers. These trends suggest the impact of PGC amongst the mentee and the mentor in ways that goes beyond the scope of this research.

Another research on PGC involves counselor education. There were numerous peer leaders who developed an interest in counseling. As juniors and seniors were exposed to the group process, listening skills, helping skills, confidentiality, non-verbal communication, and other relevant counseling skills, peer leaders shared that they liked being a mentor, confidant, and helper. Peer mentoring was a great way to introduce these soft counseling skills to high school students, which facilitated an interest in counseling related professions such as social work, school counseling, and psychology. It is worth further investigation how counselor education programs can extend into the high school curriculum. Counseling programs from local universities can use PGC as an opportunity to create a pipeline of counselors who would have received counselor training since high school.

A pre-service school counseling student became a PGC advisor as a part of her internship experience during this study. As a PGC advisor, her responsibilities included being in the PGC classroom every day to advise upper classmen on various PGC related topics found in the scope and sequence of the program. She was exposed to experiences

that may have strengthened her counseling skills due to her responsibilities in curriculum planning, classroom management, team-teaching, collaboration, group facilitation, and consultation. As the site advisor for this particular graduate student, it was shared with me by her university supervisor that there was a noticeable confidence in her development as a school counselor in comparison to her peers.

PGC has the potential to become an all-encompassing program due to its possible interactions with many factors that are relevant in providing supports in education.

References

Acar, E. (2011). Effects of social capital on academic success: A narrative synthesis. *Education Research and Reviews, 6(6),* 456-461. Retrieved from http://www.academicjournals.org/journal/ERR/article-full-text-pdf/8BD71B95320

Akos, P., & Galassi, J. P. (2004). Middle and high school transitions as viewed by students, parents, and teachers. *Professional School Counseling, 7,* 212-221.

Alliance for Excellent Education. (2007). *The high cost of high school dropouts: What the nation pays for inadequate high schools* (Issue Brief). Washington, DC: Author. Retrieved from www.oxydiane.net/IMG/pdf/HighCost.pdf

American School Counselor Association. (2012). ASCA national model: A framework for school counseling programs (3rd ed.) Alexandria, VA.

Balfanz, R., & Legters, N. (2004). *Locating the dropout crisis: Which high schools produce the nation's dropouts? Where are they located? Who attends them?* (Report 70). Baltimore, MD: Johns Hopkins University.

Baltimore City Public Schools. (2017a). City schools at a glance. Retrieved from: http://www.baltimorecityschools.org/about/by_the_numbers

Barber, B. K., & Olsen, J. A. (2004). Assessing the transitions to middle and high school. *Journal of Adolescent Research, 19(1),* 3-30. http://dx.doi.org/10.1177/0743558403258113

Bishop, J. A., & Inderbizen, H. M. (1995). Peer acceptance and friendship: An investigation of their relation to self-esteem. *The Journal of Early Adolescence, 15,* 476-489. doi: 10.1177/0272431695015004005.

Bourdieu, P. (1986). The Forms of Capital. In J. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241-258). New York: Greenwood.

Bruce, M., & Bridgeland, J. (2014). The mentoring effect: Young people's perspectives on the outcomes and availability of mentoring. Retrieved from http://www.mentoring.org/new-site/wp-content/uploads/2015/09/The_Mentoring_Effect_Executive_Summary.pdf

Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher, 18(1),* 32-42.

Bryan, J., Holcomb-McCoy, C., Moore-Thomas, C. & Day-Vines, M. L. (2009). Who sees the school counselor for college information? A national study. *Professional School Counseling, 12,* 280-29. doi: 10.5330/PSC.n.2010-12.280

Bryan, J., Moore-Thomas, C., Day-Vines, N. L., & Holcomb-McCoy, C. (2011). School counselors as social capital: The effects of high school college counseling on college application rates. *Journal of Counseling & Development, 89,* 190-199.

Benner, A. D., & Graham, S. (2009). The transition to high school as a developmental process among multiethnic urban youth. *Child Development, 80(2),* 356-376. http://dx.doi.org/10.1111/j.1467-8624.2009.01265.x

Blau, J. R., & Blau, P.M. (1982). The cost of inequality: Metropolitan structure and violent crime. *American Sociological Review, 47,* 114-129.

Bowie, Liz. (2016, April 9). Water from a fountain? Not in Baltimore city schools. *The Baltimore Sun.* Retrieved from

http://www.baltimoresun.com/news/maryland/baltimore-city/bs-md-ci-lead-in-water-20160409-story.html

Cavanagh, S. E., Riegle-Crumb, C., & Crosnoe, R. (2007). Puberty and the education of girls. *Social Psychology Quarterly, 70(2)*, 186-198.

Center for Promise. (2015). Don't quit on me: What young people who left school say about the power of relationships. Retrieved from http://www.americaspromise.org/report/dont-quit-me

Center for Supportive Schools. Retrieved from http://supportiveschools.org/

Chase-Lansdale, P. K., & Pittman, L. (2002). Welfare reform and parenting: Reasonable expectations. *The Future of Children, 12(1),* 167-185.

Cholewa, B., Burkhardt, C. K., & Hull, M. F. Are school counselors impacting underrepresented students' thinking about postsecondary education?: A nationally representative study. *Professional School Counseling, 19(1),* 114-154. doi: 10.5330/1096-2409-19.1.114

Clinedinst, M. (2015). 2014 State of college admission report. Arlington, VA: National Association for College Admission Counseling. Retrieved from http://www.nacacnet.org/research/PublicationsResources/Marketplace/research/Pages/StateofCollegeAdmission.aspx

Cobb, P., & Bowers, J. (1999). Cognitive and situated learning perspectives in theory and practice. (1999). *Educational Researcher, 28(2),* 4-15.

Cohen, J., & Smerdon, B. (2009) Tightening the dropout tourniquet: Easing the transition from middle to high school. *Preventing School Failure, 53,* 201-246.

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 94,* 95-120.

Collaborative for Academic, Social, and Emotional Learning. (2013). 2013 CASEL guide: Effective social and emotional learning programs. Retrieved form http://casel.org/guide/

Conforti, P. A. (2013). What is college and career readiness? A summary of state definitions. Pearson. Retrieved from http://researchnetwork.pearson.com/wp-content/uploads/TMRS-RIN_Bulletin_22CRCDefinitions_051313.pdf

Creech, J. (2000). *Reducing dropout rates*. Education Benchmark 2000 Series. Atlanta, GA: Southern Regional Education Board.

Dahir, C. A., & Stone, C. B. (2005). School counselor accountability: Leaving no school counselor behind. *New York State School Counseling Journal, 1,* 13-20.

Darling, N., Hamilton, S., Toyokawa, T., & Matsuda, S. (2002). Naturally occurring mentoring in Japan and the United States: Roles and correlates. *American Journal of Community Psychology, 30,* 245-270. doi:10.1023/A:1014684928461

DuBois, D. L., Portillo, N., Rhodes, J. E., Silverthorn, N., & Valentine, J. C. (2011). How effective are mentoring programs for youth? A Systematic assessment of the evidence. *Psychological Science in the Public Interest, 12(2),* 57-91. Retrieved from http://www.rhodeslab.org/files/DuBoisetalMeta.pdf

Engstrom, C., & Tinto, V. (2008). Access without support is not opportunity. *Change, 40,* 46-50.

Fine, M. (1991). *Framing drop-out: Notes on the politics of an urban public high school.* Albany: State University of New York Press.

Furman, W., & Buhrmester, D. (1992). Age and sex differences in perceptions of networks of personal relationships. *Child Development, 63,* 103-115. doi: 10.2307/1130905.

Gaddis, S. M. (2012). What's in a relationship? An examination of social capital, race, and class in mentoring relationships (Revised). *Social Forces, 90(4),* 1237-1269.

Garringer, M. (2007). *The ABCs of school-based mentoring: Effective strategies for providing quality youth mentoring in schools and communities.* Washington, DC: Hamilton Fish Institute on School and Community Violence.

George, Justin. (2017, January 25). 26 killings in 25 days: Baltimore police search for solutions to year's lethal start. *The Baltimore Sun.* Retrieved from http://www.baltimoresun.com/news/maryland/crime/bs-md-ci-violence-20170125-story.html

Gershoff, E. T., Aber, J. L., & Lennon, M. C. (2007). Income is not enough: Incorporating material hardship into models of income associations with parenting and child development. *Child Development, 78,* 70-95. doi: 10.1111/j.1467-8624.2007.00986.x

Gray, S. (2015, April 28). 6 shocking facts about poverty in Baltimore. *Attn*. Retrieved from https://www.attn.com/stories/1541/baltimore-poverty-facts

Hall-Lande, J. A., Eisenberg, M. E., Christenson, S. L., & Neumark-Sztainer, D. (2007). Social isolation, psychological health, and protective factors in adolescence. *Adolescence, 42(166),* 265-286. Retrieved from https://facweb.northseattle.edu/lchaffee/PSY100/Journal%20Articles/Hall-Lande%20et%20al%202007.pdf

Hansen, D. J, Giacoletti, A. M., & Nangle, D. W. (1995). Social interactions and adjustment. In V. B. Van Hasselt & M. Hersen (Eds.), *Handbook of adolescent psychopathology: A guide to diagnosis and treatment.* New York: Lexington Books.

Herrera, C., Grossman, J.B., Kauh, T. J., Feldman, A. F., & McMaken, J. (2007). *Making a difference in schools: The Big Brothers Big Sisters school-based mentoring impact study.* Philadelphia, PA: Public/Private Ventures.

House, R. M., & Hayes, R. L. (2002). School counselors: Becoming key players in school reform. *Professional School Counseling, 5(4)*, 249-256.

Hoxby, C., & Avery, C. (2013). The missing "one-offs": The hidden supply of high-achieving, low-income students. *Brookings Papers on Economic Activity*, 1-65.

Hurwitz, M., & Howell, J. (2014). Estimating causal impacts of school counselors with regression discontinuity designs. *Journal of Counseling & Development, 92,* 316-327.

Isakson, K., & Jarvis, P. (1999). The adjustment of adolescents during the transition into high school: A short-term longitudinal study. *Journal of Youth and Adolescence, 28,* 1-26.

Johnson, V. L., Simon, P., & Mun, E. (2014). A peer-led high school transition program increases graduation rates among Latino males. *The Journal of Education Research, 107(3),* 186-196.

Kawachi, I. Kennedy, B.P., & Wilkinson, R. G. (1990). *Income inequality and health: A reader.* New York, NY: New Press.

Laird, J., Kienzi, G., DeBell, M., & Chapman, C. (2007). *Dropout rates in the United States: 2005* (NCES 2007-059). Washington DC: National Center for Education Statistics. Retrieved from http://nces.ed.gov/pubs2007/2007059.pdf.

La Greca, A. M., Davila, J., & Siegel, R. (2008) Friendships, romantic relationships, and depression. In. N. Allen & L. Sheeber (Eds.), *Adolescent emotional development and the emergence of depressive disorders.* NY: Cambridge University Press.

La Greca, A.M. & Lopez, N. (1998). Social anxiety among adolescents: Linkages with peer relations and friendships. *Journal of Abnormal Child Psychology, 26(2),* 83-94.

La Greca, A. M., & Prinstein, M. J. (1999). The peer group. In W. K. Silverman & T. H. Ollendick (Eds.), *Developmental issues in the clinical treatment of children and adolescents* (pp.171–198.) Needham Heights, MA: Allyn & Bacon.

Lipsey, M. W., & Wilson, D. B. (2001). *Practical meta-analysis.* Thousand Oaks, CA: Sage.

Mitchell. B. (2013, April 29). Baltimore polytechnic institute: A model of desegregation before brown. Retrieved from https://www.youtube.com/watch?v=R5h7RHp7XgM

Karcher, M. J. (2005). The effects of developmental mentoring and high school mentors' attendance on their young mentees' self-esteem, social skills, and connectedness. *Psychology in the Schools, 42(1),* 65-77.

Langenkamp, A. G. (2010). Academic vulnerability and resilience during the transition to high school: The role of social relationships and district context. *Sociology of Education, 83(1),* 1-19.

MacIver, D. J., & Epstein, J. L. (1991). Responsive practices in the middle grades: Teacher teams, advisory groups, remedial instruction, and school transition programs. *American Journal of Education, 99,* 587-622.

Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist, 41,* 954-969. doi:10.1037/0003-066X.41.9.954

Maryland Report Card (2016). Baltimore polytechnic institute. *Maryland State Department of Education.* Retrieved from http://reportcard.msde.maryland.gov/Entity.aspx?k=300403

McDonough, P.M. (1997). *Choosing colleges: How social class and schools structure opportunity.* Albany, NY: State University of New York Press.

McDonough, P. M. (2005). *Counseling and college counseling in America's high schools.* Alexandria, VA: National Association for College Admissions Counseling (NACAC).

McDowell. D. J., Kim, M., O'Neil, R., & Parke, R. D. (2002). Children's emotional regulation and social competence in middle childhood: The role of maternal and paternal interactive style. *Marriage & Family Review, 34,* 345-364. doi:10.1300/J002v34n03_07

McKillip, M. E. M., Rawls, A., & Barry, C. (2012). Improving college access: A review of research on the role of high school counselors. *Professional School Counseling, 16,* 49-58.

MENTOR/National Mentoring Partnership. (2006). *Mentoring in America 2005: A Snapshot of the current state of mentoring.* Alexandira, VA: Author.

Mishkind, A. (2014). Overview: State definitions of college and career readiness. College & Career Readiness & Success Center at American Institutes for Research. Retrieved from http://www.ccrscenter.org/sites/default/files/CCRS%20Defintions%20Brief_REV_1.pdf

National Research Council & Institute of Medicine. (2009). *Preventing mental, emotional, and behavioral disorder among young people: Progress and Possibilities*. Washington, DC: National Academies Press.

National Science Foundation. (2016a). Science and engineering indicators 2016. Retrieved from: https://www.nsf.gov/statistics/2017/nsf17310/

National Science Foundation. (2016b). Women, minorities, and persons with disabilities in science and engineering. Retrieved from: https://www.nsf.gov/statistics/2017/nsf17310/

National Office for School Counselor Advocacy. (2012). The college board 2012 national survey of school counselor and administrators: Report on survey findings, barriers and supports to school counselor success. Retrieved from http://media.collegeboard.com/digitalServices/pdf/nosca/Barriers-Supports_TechReport_Final.pdf

Pasricha, S. (TEDx Talks). (2014, September 8). The critical assets for success. *TEDxWilmington.* Retrieved from https://www.youtube.com/watch?v=nqwTRl9cdn4

Peer Group Connection (2009, October). High school transition program improves student outcomes: A report on recent study findings. *Center for Supportive Schools*. Retrieved from http://supportiveschools.org/wp-content/uploads/2013/11/results-PGC-2013-11-20.pdf

Peer Group Connection High School (2015a). *Advisor Handbook.* Unpublished manuscript. Center for Supportive Schools, Princeton, New Jersey.

Peer Group Connection High School (2015b). *Outreach Handbook*. Unpublished manuscript. Center for Supportive Schools, Princeton, New Jersey.

Pianta, R. C., & Stuhlman, M. W. (2004). Teacher-child relationships and children's success in the first years of school. *School Psychology Review, 33,* 444-458.

Pickles, A., & Rutter, M. (1991). Statistical and conceptual models of 'turning points' in developmental processes. In D. Magnusson, D., L. R., Bergman, G. Rudinger, & B. Torestad (Eds.), *Problems and methods in longitudinal research: Stability and change* (pp. 133-165). Cambridge: Cambridge University Press.

Prudente, T. (2017a). Baltimore schools chief proposes up to 300 layoffs to balance district budget. *Baltimore Sun.* Retrieved from http://www.baltimoresun.com/news/maryland/education/k-12/bs-md-ci-city-schools-layoffs-20170512-story.html

Prudente, T. (2017b). Baltimore teachers union files second grievance over layoffs. *Baltimore Sun.* Retrieved from: http://www.baltimoresun.com/news/maryland/education/bs-md-ci-teachers-union-grievance-20170605-story.html

Putnam, R. D. (2000). Bowling along: The collapse and revival of American community. New York: Simon & Schuster.

Rhodes, J. (2015). Mentoring is not enough: We also need to move upstream. *The Chronicle of Evidence-Based Mentoring*. Retrieved from http://chronicle.umbmentoring.org/mentoring-is-not-enough-we-also-need-to-move-upstream/

Rice, E. (Interviewer) & Alexander, K. (Interviewee) (2013). An interview with Karl L. Alexander: John Dewey professor of sociology. Retrieved from https://www.youtube.com/watch?v=cSvfozwT-9I&t=1s

Rogosic, S., & Baronovic, B. (2016). Social capital and educational achievements: Coleman vs. Bourdieu. *CEPS Journal*, *6(20),* 81-100.

Ross, M. (2016). Establishing an effective school-based peer mentoring program. *CSS Lunch & Learn Webinar Series.* Webinar retrieved from https://www.youtube.com/watch?v=DUQiJfDcr1A

Savin-Williams, R. C., & Berndt, T. J. (1990). Friendship and peer relations. In S. S. Feldman & G. R. Elliot (Eds.), *At the threshold: The developing adolescent.* Cambridge, MA: Harvard University Press.

School Board Meeting. (2017, June 13*).* June 13, 2017 school board meeting part 1. [Video file]. Retrieved from https://vimeo.com/222413848

Shadish, W. R., Cook, T. D., & Campell, T. D. (2002). *Experimental and Quasi-Experimental Designs for Generalized Causal Inference.* Boston, MA: Hougton Mifflin.

Stanton-Salazar, R. D. (1997). A social capital framework for understanding the socialization of racial minority children and youths. *Harvard Educational Review, 67(1),* 1-40.

Stanton-Salazar, R. D. (2010). A social capital framework for the study of institutional agents and their role in the empowerment of low-status students and youth. *Youth & Society, 43(3),* 1066-1109.

Stanton-Salazar, R.D. & Dornbusch, S. M. (1995). Social capital and the reproduction of inequality: Information networks among Mexican-origin high school students. *Sociology of Education, 68(2),* 116-135.

The College Board National Office for School Counselor Advocacy. (2012). National survey of school counselors and administrators. Retrieved from https://secure-media.collegeboard.org/digitalServices/pdf/nosca/Barriers-Supports_TechReport_Final.pdf

The White House Office. (2014) Remarks by the First Lady to the American school counselor association annual conference in Orlando, FL. Retrieved from: https://www.whitehouse.gov/the-press-office/2014/07/01/remarks-first-lady-american-school-counselor-association-annual-conference

Thomsen, R. C. (1984). The integration of Baltimore's polytechnic institute: A Reminiscence. *Maryland Historical Magazine, 79(3),* 235-238.

Tooley, M., & Bornfreund, L. (2014). *Skills for success: Supporting and assessing key habits, mindsets, and skills in prek-12*. Retrieved from: https://na-production.s3.amazonaws.com/documents/skills-for-success.pdf

U.S. Department of Education. (2012). *ESEA flexibility request: Maryland.* Washington, DC: Author. Retrieved from http://www2.ed.gov/policy/elsec/guid/esea-flexibility/map/md.html

Uvaas, T., & McKevitt, B. C. (2013). Improving transitions to high school: A review of current research and practice. *Preventing School Failure, 57(2),* 70-76.

Wehlage, G. G., Rutter, R. A., Smith, G. A., Lesko, N., & Fernandez, R. R. (1989). *Reducing the risk: Schools as communities of support.* London: Falmer Press.

Wenger, Y. (2015, May 26). Unrest will cost city $20 million, officials estimate. *Baltimore Sun.* Retrieved from http://www.baltimoresun.com/news/maryland/baltimore-city/bs-md-ci-unrest-cost-20150526-story.html

Wholey, J. (2010). Exploratory evaluation. In J. Wholey, H. Hatry, & K. Newcomer (Eds.), *Handbook of practical program evaluation* (pp. 81-99). San Francisco, CA: Jossey-Bass.

Yoshikawa. H. Aber, J. L., & Beardslee, W. R. (2012). The effects of poverty on the mental, emotional, and behavioral health of children and youth: Implications for prevention. *American Psychologist, 67(4),* 272-284.

YouthTruth. (2017). Learning from student voice: Most high schoolers feel unprepared for college and careers. Retrieved from file:///C:/Users/Administrator.LPT403A304238/Downloads/YouthTruth%20Learning%20From%20Student%20Voice%20College%20and%20Career%20Readiness.pdf

Zahidi, S. (2016). America is falling behind other countries in gender equality. The next president must fix that. *World Economic Forum*. Retrieved from https://www.weforum.org/agenda/2016/10/global-gender-gap-2016-usa-saadia-zahidi/

Appendix A

Student Views about High School Transition Survey

1. Grade
2. Gender
3. Please approximate your cumulative GPA
4. Did a representative from School X help you make your choice to enroll?
   a. Yes b. No
5. Did you participate in any of the following high school transition programs? Please check all that apply.
   a. Shadow Program b. Visit Day c. Open House d. Articulation
   e. Orientation f. High School Prep g. High School Fair
6. *Do you feel that School X helped you have a smooth transition from middle school to high school?
7. *Do you feel supported at School X academically?
8. *Do you feel supported at School X socially?
9. Who encourages you to do well in academics the most?
10. *Do you feel a sense of community at School X?
11. *Did you make an informed decision to attend School X?
12. *Do you think that School X will help you reach your goals (is School X a good fit)?
13. *Do you feel that Baltimore City Public Schools (North Avenue) helped you identify high school that best fit your interest?
14. What is your mother's highest level of education?
15. What is your father's highest level of education?
16. How many hours do you work (paying job) per week?
17. How many extracurricular activities are you involved in?

Note. *Likert-scale 5 = highly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = highly disagree

Appendix B

Social Capital Survey

Please circle your answers.

1. Gender
A. Male
B. Female

2. Race
A. Black
B. White
C. Hispanic/Latino
D. Asian
E. Other: _____

3. So far, I've had a good transition to high school
A. Highly Agree B. Agree C. Disagree D. Highly Disagree

4. High school has been stressful
A. Highly Agree B. Agree C. Disagree D. Highly Disagree

5. High school makes me anxious
A. Highly Agree B. Agree C. Disagree D. Highly Disagree

6. I feel overwhelmed with the amount of homework
A. Highly Agree B. Agree C. Disagree D. Highly Disagree

7. I feel lost at school
A. Highly Agree B. Agree C. Disagree D. Highly Disagree

8. I have supportive peer relationships at School X.
A. Highly Agree B. Agree C. Disagree D. Highly Disagree

9. I have friends at School X that I can trust.
A. Highly Agree B. Agree C. Disagree D. Highly Disagree

10. I feel alone at School X.
A. Highly Agree B. Agree C. Disagree D. Highly Disagree

11. If I was absent from school, I have peers that I can go to gain access to assignments that were assigned.
A. Highly Agree B. Agree C. Disagree D. Highly Disagree

12. If I need help, I have someone at School X that I can go to.

A. Highly Agree B. Agree C. Disagree D. Highly Disagree

13. I have someone at School X to go to if I need help with homework.

A. Highly Agree B. Agree C. Disagree D. Highly Disagree

14. School X is a place where I feel safe.

A. Highly Agree B. Agree C. Disagree D. Highly Disagree

15. School X challenges me academically.

A. Highly Agree B. Agree C. Disagree D. Highly Disagree

16. I can be successful at School X.

A. Highly Agree B. Agree C. Disagree D. Highly Disagree

17. My mother's highest level of education is:

A. Less than high school
B. High school
C. Associates degree (community college)
D. Bachelor's degree (4-year college)
E. Master's degree
F. Doctoral degree
G. Professional (Doctor, Lawyer, Pharmacist)

17. My father's highest level of education is:

A. Less than high school
B. High school
C. Associates degree (community college)
D. Bachelor's degree (4-year college)
E. Master's degree
F. Doctoral degree
G. Professional (Doctor, Lawyer, Pharmacist)

Appendix C

Parental Informed Consent Form

Johns Hopkins University

Parental Informed Consent Form

Title: Peer-Mentoring and Social Capital to Ease the Middle to High School Transition. IRB #0000358.
Principal Investigator (PI): Dr. Ileana Gonzalez, Assistant Professor, JHU School of Education
Date: July 26, 2016

Purpose of Research Study

The purpose of the study is to examine the relationships between participation in a peer-mentoring program called Peer Group Connection (PGC) and GPA, failure rates, social anxiety, and social capital. The goal of the study is to attain information on how peer-mentoring can contribute to support and ease the transition from middle school to high school. We are doing a study to see if PGC works which involves answering surveys, in addition to the activities that students do during PGC. Some students decided not to take PGC, and they will be answering the same questions to see if their experiences through the year are different. Students may participate in PGC and choose not to participate in the study. Participation in the study is completely voluntary. The current study hypothesizes that freshmen students who participate in PGC will have less social anxiety, higher social capital, higher grades, and lower failure rates when compared to non-PGC students.

Procedures

There will be several components for this study:

1. Students in PGC will participate once a week during health and physical education for the 2016-2017 school year. Students not in PGC will stay in their health and physical education classes.
2. Students who choose to participate in the study student will be asked to complete a brief survey.
    a. *Social Anxiety Scale for Adolescents (SAS-A)* - Measures 1) fear of negative evaluation to asses students' fears, concerns, or worries regarding negative evaluations from peers, 2) social avoidance and distress to reflect social avoidance and distress with new social situations or unfamiliar peers, general social distress, discomfort, and inhibition.
    b. *Social Capital Survey* - Measures students' level of social capital in the areas of 1) trust, 2) information channels, 3) norms and effective sanctions, and 4) demographic information.
    c. *PGC End of Year Survey for Participants and Peer-Leaders* (PGC students only).
    d. *GPA and Failure Rates* - Data will be collected through the student information system.
3. Your student's final grades will be collected (without their name attached to these scores; only group data will be published).

Risks/Discomforts

There are no anticipated risks to students.

Benefits

Potential benefits of the study include an increased understanding of how to implement school counseling interventions at Baltimore Polytechnic Institute. Participants in PGC are able to socialize in an intimate setting, making a big school seem a little smaller. Participants in PGC will be given the opportunity to share their feelings, talk about their issues and concerns, and connect with upperclassmen for advice. Sessions are activity-based, which is not typical of a traditional classroom setting. These benefits are prescribed by the Center for Supportive Schools (CSS) and are a fundamental component of PGC. The study at hand will be able to better understand the connections between a successful high school transition and its influence on academic and social success throughout the high school experience, thus impact students' academic trajectories and post secondary opportunities. We suspect that students who participate in PGC will meet some College and Career Readiness standards outlined by Mishkind (2014). Students in PGC will be more equipped to contribute to society because they will be asked to think critically, communicate, use interpersonal skills, identify their goals and how to achieve them, and ask for help when needed. For example, participants will be asked to explore how behaviors can contribute to a more caring community, understand the importance of building trust in a group, recognize that both failure and success are essential to the game of life, and explore the variety of factors that are important when discussing one's culture. The PGC scope and sequence is robust and are intended to cultivate the groundwork for a successful high school experience and beyond.

Title: Peer-Mentoring and Social Capital to Ease the Middle to High School Transition. IRB #0000358.
PI: Dr. Ileana Gonzalez, Assistant Professor, JHU School of Education
Date: July 26, 2016

Voluntary Participation and Right to Withdraw:
Your child's participation in this study is entirely voluntary. You choose whether to allow your child to participate, and your child will indicate below whether he or she agrees to take part in the study. If you decide not to allow your child to participate, or your child chooses not to participate, there are no penalties, and neither you nor your child will lose any benefits to which you would otherwise be entitled.
You or your child can stop participation in the study at anytime, without any penalty or loss of benefits. If you want to withdraw your child form the study, or your child wants to stop participating, please contact the student investigator Mr. Christian G. Lorenzo via phone or e-mail: (410) 396-7030, cglorenzo@bcps.k12.md.us.

Confidentiality
Any study records that identify you or your child will be kept confidential to the extent possible by law. The records from your child's participation may be reviewed by people responsible for making sure that research is done properly. Otherwise, records that identify you or your child will be available only to people working on the study, unless you give permission for other people to see the records.

Surveys will be collected in electronic format. Data will not include student's ID number. Once we have confirmed that the correct data have been associated with each other, all reference to the participant's identity will be deleted. The only remaining identifier will be on the consent form, which will be stored securely and not contain information that can link that participant name back to the data.

All research data and notes will be stored on the PI's computer which is password protected. Any original files will be erased three years after collection.

Only group data will be included in publication; no individual achievement data will ever be published.

If You Have Questions Or Concerns
You and your child can ask questions about this research study at any time during the study by contacting Mr. Christian G. Lorenzo via phone or email: (410) 396-7030, cglorenzo@bcps.k12.md.us.

If you or your child have questions about your child's rights as a research participant or feel that your child has not been treated fairly, please call the Homewood Institutional Review Board at Johns Hopkins University at (410) 516-6580.

Signatures
What your signature means:

- Your signature below means that you understand the information in this consent form.
- Your signature also means that you agree to allow your child to participate in the study.
- Your child's signature indicates that he or she agrees to participate in the study.
- By signing this consent form, you and your child have not waived any legal rights your child otherwise would have as a participant in a research study.

Child's Name: _____

Child's Signature: _____ Date: _____

Name of Parent or Legal Guardian: _____ Date: _____

Signature of Parent or Legal Guardian: _____ Date: _____

Appendix D

Social Capital Survey - Revised

Survey B

Directions: From a scale of 1-5, rate the how each question below is true for you.

1 = Highly disagree 2 = Disagree 3 =Neutral 4 = Agree 5 = Highly agree

Question	Rating
1. I have peers at school that support me.	
2. I have friends at school that I can trust.	
3. I feel alone at school.	
4. If I was absent from school, I have a peer that I can go to for missed work.	
5. If I need help, I have a teacher at school that I can go to.	
6. If I have issues at home, I have someone at school that I can reach out to for advice/help.	
7. School is a place where I feel safe.	
8. I have learned lessons in school about persevering through adversity.	
9. I can be successful in school.	
TOTAL	

Directions: Please circle your answer to the questions below.

10. Gender:
    a. Male b. Female

11. Race:
    a. Black b. White c. Hispanic/Latino d. Asian e. Other: _____

12. My mother's highest level of education is:
    a. Less than high school
    b. High school
    c. Some college
    d. Associates degree (community college)
    e. Bachelor's degree (4-year college)
    f. Master's degree
    g. Doctoral degree
    h. Professional (Doctor, Lawyer, Pharmacist, Dentist)

13. My father's highest level of education is:
    a. Less than high school
    b. High school
    c. Some college
    d. Associates degree (community college)
    e. Bachelor's degree (4-year college)
    f. Master's degree
    g. Doctoral degree
    h. Professional (Doctor, Lawyer, Pharmacist, Dentist)

Appendix E

Social Anxiety Scale for Adolescents

Survey A

Directions: From a scale of 1-5, please rate how each question below is true for you.

1 = Never 2 = Almost never 3 = Sometimes/occasionally 4 = Almost all the time 5 = all the time

Question	Rating
1. I worry about doing something new in front of others.	
2. I like to play sports.	
3. I worry about being teased.	
4. I feel shy around people I don't know.	
5. I only talk to people I know really well.	
6. I feel that peers talk about me behind my back.	
7. I like to going to the guidance office.	
8. I worry about what others think of me.	
9. I'm afraid that others will not like me.	
10. I get nervous when I talk to peers I don't know very well.	
11. I like going to coach class.	
12. I worry about what others say about me.	
13. I get nervous when I meet new people.	
14. I worry that others don't like me.	
15. I am quiet when I'm with a group of people.	
16. I like going to the library.	
17. I feel that others make fun of me.	
18. If I get into an argument, I worry that the other person will not like me.	
19. I'm afraid to invite others to do things with me because they might say no.	
20. I feel nervous when I'm around certain people.	
21. I feel shy even with peers I know very well.	
22. It's hard for me to ask others to do things with me.	
TOTAL	

Appendix F

End of Year Feedback from Outreach Participants

CENTER FOR SUPPORTIVE SCHOOLS

PEER GROUP CONNECTION

PGC-HIGH SCHOOL

End-of-Year Feedback from Outreach Participants

pgc

School Name: _____

Section 1

We would like to know the ways in which PGC has helped you adjust to high school. Please tell us with a check (✓) how much PGC has helped you:

	A Great Amount	Quite A Bit	Some-what	Very Little	Not At All
1. Make better decisions					
2. Improve your ability to set and achieve goals for yourself					
3. Care more about graduating from high school					
4. Care more about graduating from college					
5. Be more prepared for college and/or the world of work					
6. Develop more relationships with peers who are different from you					
7. Improve communication with your peers					
8. Improve communication with teachers and other school personnel					
9. Work better with others in a group to complete a project or task					
10. Improve your ability to deal with stressful situations					
11. Be more likely to ask someone for help when you have a problem					
12. Improve your ability to resolve conflicts with others					
13. Increase your motivation to earn or maintain high grades in your classes					

	A Great Amount	Quite A Bit	Some-what	Very Little	Not At All
14. Care more about attending school every day					
15. Feel more like you belong at your school					
16. Care more about staying focused to do well in school					
17. Improve communication with your parents/caregivers					
18. Increase your motivation to help your community					
19. Improve your ability to negotiate situations with others					
20. Value working together with others in a group to reach a solution that feels good to everyone					
21. Listen to and respect your peers even if you don't agree with everything they say					
22. Feel more connected to your peers					
23. Overcome setbacks to achieve important goals					
24. Be more thankful for what is positive in your life					
25. Be a leader					

Section 2

1a. How much did you look forward to meeting with your peer group?

☐ A great amount ☐ Quite a bit ☐ Somewhat ☐ Very little ☐ Not at all

1b. Please explain your response to Question 1a:

_____
_____
_____
_____

2a. How much did you feel your peer leader(s) cared about you?

☐ A great amount ☐ Quite a bit ☐ Somewhat ☐ Very little ☐ Not at all

2b. Please explain your response to Question 2a:

_____
_____
_____
_____

3. Please describe one way that PGC has been important to you this year:

_____
_____
_____
_____

4. What would make PGC better?

_____
_____
_____
_____

Section 3

1. Are you male or female? *Check (✓) one*

☐ Male ☐ Female

2. What grade are you in? *Check (✓) one*

☐ 5th ☐ 6th ☐ 7th

☐ 8th ☐ 9th ☐ 10th

☐ 11th ☐ 12th ☐ Transfer Student

3. Are you Hispanic/Latino? *Check (✓) one*

☐ No ☐ Yes

4. What is your race/ethnicity? *Check (✓) all that apply*

☐ American Indian or Alaska Native ☐ Asian ☐ Black or African-American ☐ Hispanic/Latino

☐ Native Hawaiian or Pacific Islander ☐ White ☐ Other race *(Please specify)*_____

5. When you are at home or with your family, what language or languages do you speak? *Check (✓) all that apply*

☐ English ☐ Spanish

☐ Chinese ☐ Other *(Please specify)*_____

6. What is your current age? *Check (✓) one*

☐ 10 years old ☐ 11 years old ☐ 12 years old

☐ 13 years old ☐ 14 years old ☐ 15 years old

☐ 16 years old ☐ 17 years old ☐ 18 years old

☐ 19 years old ☐ 20 years old ☐ 21 years old

7. Please use the space below to share any additional information about your gender, race/ethnicity, home language, or age. *Optional*

_____

_____

Thank you!

Appendix G

College and Career Readiness Standards and Categories

College and Career Readiness Standards and Categories	End of Year Feedback from Outreach Participants Item
Interpersonal Skills	6. Develop more relationships with peers who are different from you. 7. Improve communication with your peers. 8. Improve communication with teachers and other school personnel. 12. Improve your ability to resolve conflicts with others. 17. Improve communication with your parents/caregivers. 19. Improve your ability to negotiate situations with others. 21. Listen to and respect your peers even if you don't agree with everything they say. 22. Feel more connected to your peers.
Initiative	11. Be more likely to ask someone for help when you have a problem. 13. Increase your motivation to earn or maintain high grades in your classes. 14. Care more about attending school everyday. 16. Care more about staying focused to do well in school. 18. Increase your motivation to help your community.
Goal Setting	2. Improve ability to set and achieve goals for yourself. 23. Overcome setbacks to achieve important goals.
Collaboration	9. Work better with others in a group to complete a project or a task. 20. Value working together with others in a group to reach a solutions that feels good. 25. Be a leader.
Critical Thinking	1. Make better decisions. 3. Care more about graduation from high school. 4. Care more about graduating from college. 5. Be more prepared for college and/or the world of work.
Social-Emotional	10. Improve your ability to deal with stressful situations. 15. Feel more like you belong at you school. 24. Be more thankful for what is positive in your life.

Appendix H

Scope and Sequence of Outreaches (PGC High School, 2015a).

PEER GROUP CONNECTION
HIGH SCHOOL

Scope & Sequence of Outreaches

including Special Outreaches to be conducted throughout the year

Outreach Title	Outreach Learning Objectives
OUTREACH 1. Freshman Orientation: *An Introduction to PGC-HS*	• Explain what *Peer Group Connection-High School* (PGC-HS) is all about and what 9th graders can expect as participants • Introduce 9th graders to the other members of their outreach groups and to peer leaders
OUTREACH 2. Activity Day	• Get to know each other better • Learn more about how PGC-HS will work by establishing some group ground rules together
OUTREACH 3. Pieces of Me	• Identify personality traits and preferences that help define who we are • Share pieces of our personality so that we can better understand what to expect from each other
OUTREACH 4. The Freshman Experience: *Choices, Challenges, Chances*	• Explore the differences between middle and high school • Think about the things that we can do to be successful this year
OUTREACH 5. Showing Up – Part 1	• Understand the effect that not showing up can have on both the person who is absent as well as on the group • Think about why showing up to school and attending class matters • Consider how showing up affects graduation
OUTREACH 6. Showing Up – Part 2: *Knowledge, Action, Power*	• Explore what it means to show up—what it looks like, feels like, and sounds like • Understand the importance of showing up • Think about the ways that we can show up, even when it's hard
OUTREACH 7. Creating a Caring Community	• Examine how what we say and do contributes to how others feel • Explore how our behaviors can contribute to a more caring community

Outreach Title	Outreach Learning Objectives
OUTREACH 8. Risky Business	• Communicate effectively without speaking • Experience and reflect on a risk-taking exercise • Understand the importance of building trust in a group
OUTREACH 9. Batting a Thousand: *The Relationship Between Failure and Success*	• Recognize that both failure and success are essential to the game of life • Share ideas about how we handle challenges so that we can keep showing up, trying our best, and moving towards our goals
OUTREACH 10. Getting to the Goal	• Examine strategies for avoiding pitfalls and roadblocks that can get in the way of reaching our goals • Think about how we can stay focused, keep showing up, and try our best to achieve our goals
OUTREACH 11. Culture Cake	• Explore the variety of factors that are important when discussing one's culture • Better understand ourselves and each other
OUTREACH 12. My Toughest Class	• Share stories about the toughest classes we are taking right now • Think about strategies that we can use to manage ourselves in difficult classes
OUTREACH 13. Mindset – Part 1	• Explore our personal perceptions about intelligence • Learn about growth mindset, or how we can develop our brains—just like a muscle
OUTREACH 14. Mindset – Part 2	• Explore facts about the brain and learning • Practice changing fixed mindset statements into growth mindset statements
OUTREACH 15. Pockets, Pockets	• Use objects that we carry in our pockets to tell stories about ourselves • Think about how we might like the world around us to change for the better
OUTREACH 16. Decisions, Decisions	• Learn more about how people make decisions • Think about how using a structured approach to making decisions can improve the quality of the decisions we make
OUTREACH 17. Clear Communication	• Practice communication skills, including negotiation, refusal, and straight talk • Understand the importance of effective communication in making good decisions and maintaining healthy relationships

Outreach Title	Outreach Learning Objectives
OUTREACH 18. Pressure Zone	• Practice modeling effective communication skills • Better understand how effective communication can help us to make healthy decisions, even when we're in difficult situations
OUTREACH 19. Safety First – Part 1	• Learn more about how safe we feel in our school and community • Understand why feeling safe is critical as we work towards our goals
OUTREACH 20. Safety First – Part 2	• Get the facts about safety for teens across the United States • Explore what we might do if we found ourselves in potentially unsafe scenarios
OUTREACH 21. Think Before You Click	• Think about the consequences of our actions on and off the internet • Build skills so we can positively impact the choices we make in our online experiences
OUTREACH 22. Integrity in the Electronic Age	• Explore the types of *cybersituations* that we might find ourselves in and articulate productive ways to resolve these situations • Learn some *Netiquette* rules that might prevent these tough situations from arising in the first place
OUTREACH 23. Ripple Effects	• Examine how the decisions we make and the actions we take have ripple effects in our lives, the lives of others, and even on our future decisions and plans • Explore how thinking about ripple effects can help us to make healthy decisions
OUTREACH 24. If I Could...	• Have fun while imagining how our futures might play out • Examine what things we have in common
OUTREACH 25. Dealing with School Issues: *Pass the Problem*	• Collect anonymous input on problems we are each facing • Learn a productive way to get support from one another when faced with a challenge
OUTREACH 26. Looking Back	• Reflect on the year and what PGC-HS has meant to us • Say goodbye in a few different ways

Appendix I

End of Year Survey for Outreach Participants: College and Career Readiness

College and Career Readiness **Interpersonal Skills**		1 Not at All	2 Very Little	3 Somewhat	4 Quite a Bit	5 A Great Amount	Mean
Please tell us how much PGC has helped you….							
Develop more relationships with peers who are different from you.	% N	7.4% 4	3.7% 2	24.1% 13	33.3% 18	31.5% 17	3.777
Improve communication with your peers.	% N	5.6% 3	7.4% 4	27.8% 15	24.1% 13	35.2% 19	3.759
Improve communication with teachers and other school personnel.	% N	5.6% 3	16.7% 9	38.9% 21	22.2% 12	16.7% 9	3.277
Improve your ability to resolve conflicts with others.	% N	7.4% 4	18.5% 10	25.9% 14	35.2% 19	13% 7	3.277
Improve communication with your parents/ caregivers.	% N	13% 7	16.7% 9	27.8% 15	18.5% 10	24.1% 13	3.240
Improve your ability to negotiate situations with others.	% N	9.3% 5	9.3% 5	37% 20	27.8% 15	16.7% 9	3.333
Listen to and respect your peers even if you don't agree with everything they say.	% N	5.6% 3	7.4% 4	27.8% 15	25.9% 14	33.3% 18	3.740
Feel more connected to your peers.	% N	3.7% 2	7.4% 4	29.6% 16	29.6% 16	29.6% 16	3.740

College and Career Readiness **Initiative**		1 Not at All	2 Very Little	3 Somewhat	4 Quite a Bit	5 A Great Amount	Mean
Please tell us how much PGC has helped you….							
Be more likely to ask someone for help when you have a problem.	% N	11.1% 6	22.2% 12	27.8% 15	25.9% 14	13% 7	3.074
Increase your motivation to earn or maintain high grades in your classes.	% N	7.4% 4	7.4% 4	25.9% 14	27.8% 15	31.5% 17	3.685
Care more about attending school every day.	% N	7.4% 4	11.1% 6	24.1% 13	18.5% 10	38.9% 21	3.703
Care more about staying focused to do well in school.	% N	7.4% 4	3.7% 2	25.9% 14	29.6% 16	33.3% 18	3.777
Increase your motivation to help your community.	% N	16.7% 9	24.1% 13	24.1% 13	18.5% 10	16.7% 9	2.944

College and Career Readiness **Goal Setting**		1 Not at All	2 Very Little	3 Somewhat	4 Quite a Bit	5 A Great Amount	Mean
Please tell us how much PGC has helped you….							
Improve your ability to set and achieve goals for yourself.	% N	9.3% 5	5.6% 3	29.6% 16	31.5% 17	24.1% 13	3.555
Overcome setbacks to achieve important goals.	% N	5.6% 2	9.3% 5	24.1% 13	29.6% 16	31.5% 17	4.000

College and Career Readiness **Collaboration**		1 Not at All	2 Very Little	3 Somewhat	4 Quite a Bit	5 A Great Amount	Mean
Please tell us how much PGC has helped you….							
Work better with others in a group to complete a project or a task.	% N	3.7% 2	13% 7	33.3% 18	27.8% 15	22.2% 12	3.518
Value working together with others in a group to reach a solution that feels good.	% N	5.6% 3	7.4% 4	33.3% 18	35.2% 19	18.5% 10	3.537
Be a leader.	% N	5.6% 3	14.8% 8	22.2% 12	14.8% 8	42.6% 23	3.740

College and Career Readiness **Critical Thinking**		1 Not at All	2 Very Little	3 Somewhat	4 Quite a Bit	5 A Great Amount	Mean
Please tell us how much PGC has helped you….							
Make better decisions.	% N	9.3% 5	11.1% 6	31.5% 17	27.8% 15	20.4% 11	3.388
Care more about graduation from high school.	% N	5.6% 3	7.4% 4	25.9% 14	16.7% 9	44.4% 24	3.870
Care more about graduating from college.	% N	7.4% 4	5.6% 3	25.9% 14	16.7% 9	44.4% 24	3.851
Be more prepared for college and/or the world of work.	% N	5.6% 3	11.1% 6	29.6% 16	35.2% 19	18.5% 10	3.50

College and Career Readiness **Social-Emotional**		1 Not at All	2 Very Little	3 Somewhat	4 Quite a Bit	5 A Great Amount	Mean
Please tell us how much PGC has helped you….							
Improve your ability to deal with stressful situations.	% N	11.1% 6	13% 7	29.6% 16	29.6% 16	16.7% 9	3.277
Feel more like you belong at your school.	% N	7.4% 4	11.1% 6	35.2% 19	20.4% 11	25.9% 14	3.463
Be more thankful for what is positive in your life.	% N	5.6% 3	7.4% 4	24.1% 13	29.6%	33.3% 18	3.777

Vitae

Christian Lorenzo earned a Bachelor of Arts degree in Psychology with a minor in Dance from the University of California, Riverside. Following graduation, Christian enrolled in the School Counseling Fellows Program at Johns Hopkins University. While working as a School Counselor in Baltimore City Public Schools, Christian completed the requirements for the Doctor of Education degree in Education with a specialization in Counseling from Johns Hopkins University in 2017.

For inquiries, Christian can be reached via e-mail: christian.glorenzo@gmail.com or twitter @L0renzoCG.